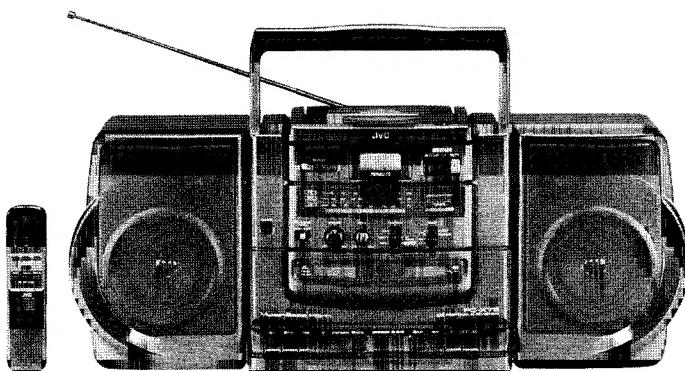


JVC

SERVICE MANUAL

CD PORTABLE SYSTEM

PC-X75BK B/E/EN/G/GI/VX



COMPACT
DISC
DIGITAL AUDIO

Area Suffix

B	U.K.
E	Continental Europe
EN	North Europe
G	Germany
GI	Italy
VX	Eastern Europe

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1. Safety Precautions

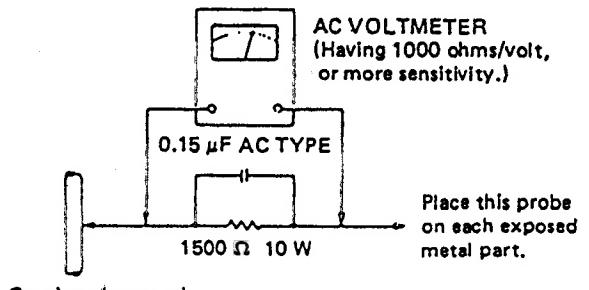
1. The design this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the product have special safety - related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of service manual. Electrical components having such features are identified by () on the schematic diagram and parts list in the service manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of service manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after reassembling.
5. Leakage current check (Electrical shock hazard testing)

After re - assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock. Do not use a line isolation transformer during this check.

- Plug the AC line cord directly into the AC outlet. using a "Leakage current tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC(r.m.s.)

• Alternate check method

Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500 ohms 10W resistor paralleled by a $0.15 \mu F$ AC type capacitor between an exposed metal part and a known good earth ground. Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured



Warning

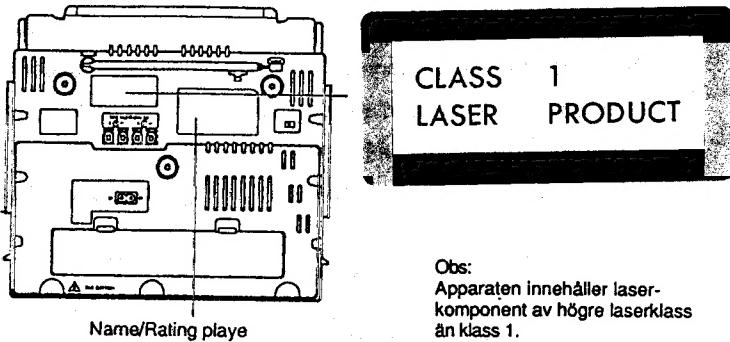
1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

2. Safety Precaution About PC - X75BK

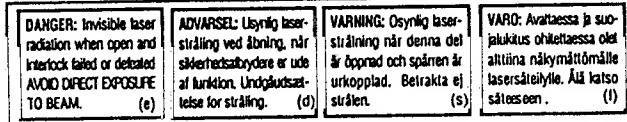
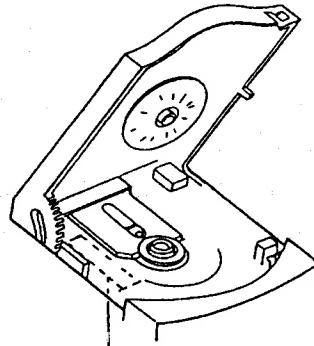
IMPORTANT FOR LASER PRODUCTS PRECAUTIONS

1. CLASS 1 LASER PRODUCT
2. **DANGER:** Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
3. **CAUTION:** Do not open the rear cover. There are no user serviceable parts inside the unit; leave all servicing to qualified service personnel.
4. **CAUTION:** The compact disc player uses invisible laser radiation and is equipped with safety switches which prevent the emission of radiation when the CD holder is open. It is dangerous to defeat the safety switches.
5. **CAUTION:** Use of controls for adjustments and the performance of procedures other than those specified herein may result in exposure to hazardous radiation.
6. **CAUTION:** The laser is able to function, if safety switches out of function. The laser light is invisible, avoid exposure, do not disassemble the laser unit, but replace the complete unit.

REPRODUCTION OF LABELS AND THEIR LOCATION



Obs:
Apparaten innehåller laser-
komponent av högre laserklass
än klass 1.



IMPORTANT (In the United Kingdom) Mains Supply (AC 230 V~, 50 Hz only)

DO NOT cut off the mains plug from this equipment. If the plug fitted is not suitable for the power points in your home or the cable is too short to reach a power point, then obtain an appropriate safety approved extension lead or consult your dealer.

BE SURE to replace the fuse only with an identical approved type, as originally fitted, and to replace the fuse cover.

If nonetheless the mains plug is cut off ensure to remove the fuse and dispose of the plug immediately, to avoid a possible shock hazard by inadvertent connection to the mains supply.

IMPORTANT

DO NOT make any connection to the terminal which is marked with the letter E or by the safety earth symbol or coloured green or green-and-yellow.

The wires in the mains lead on this product are coloured in accordance with the following code:

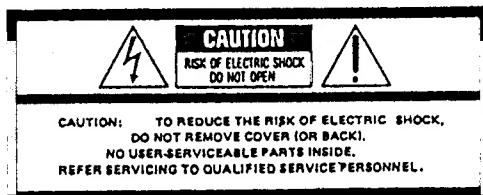


As these colours may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

IF IN DOUBT - CONSULT A COMPETENT ELECTRICIAN.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

■ Item demanding special safety precautions

1. Power transformer marking :FMTP57J2-12A

The torque of the screw driver for the power transformer must be controlled.

2. Concerning the AC socket, the next marking must be confirmed and to avoid print circuit board pattern damage. The AC socket must not float from print circuit board.

•Marking HSC1466

3. Concerning the primary terminal and the adjacent secondary terminal on the print circuit board to provide proper creeping and spatial distance, solder must not protrude from soldering round.

4. Before installation confirm the fuse capacity indication, (⊖) or (⊖) marks on the fuse capacitor when installing, confirm if the fuse is held tightly with the fuse holder.

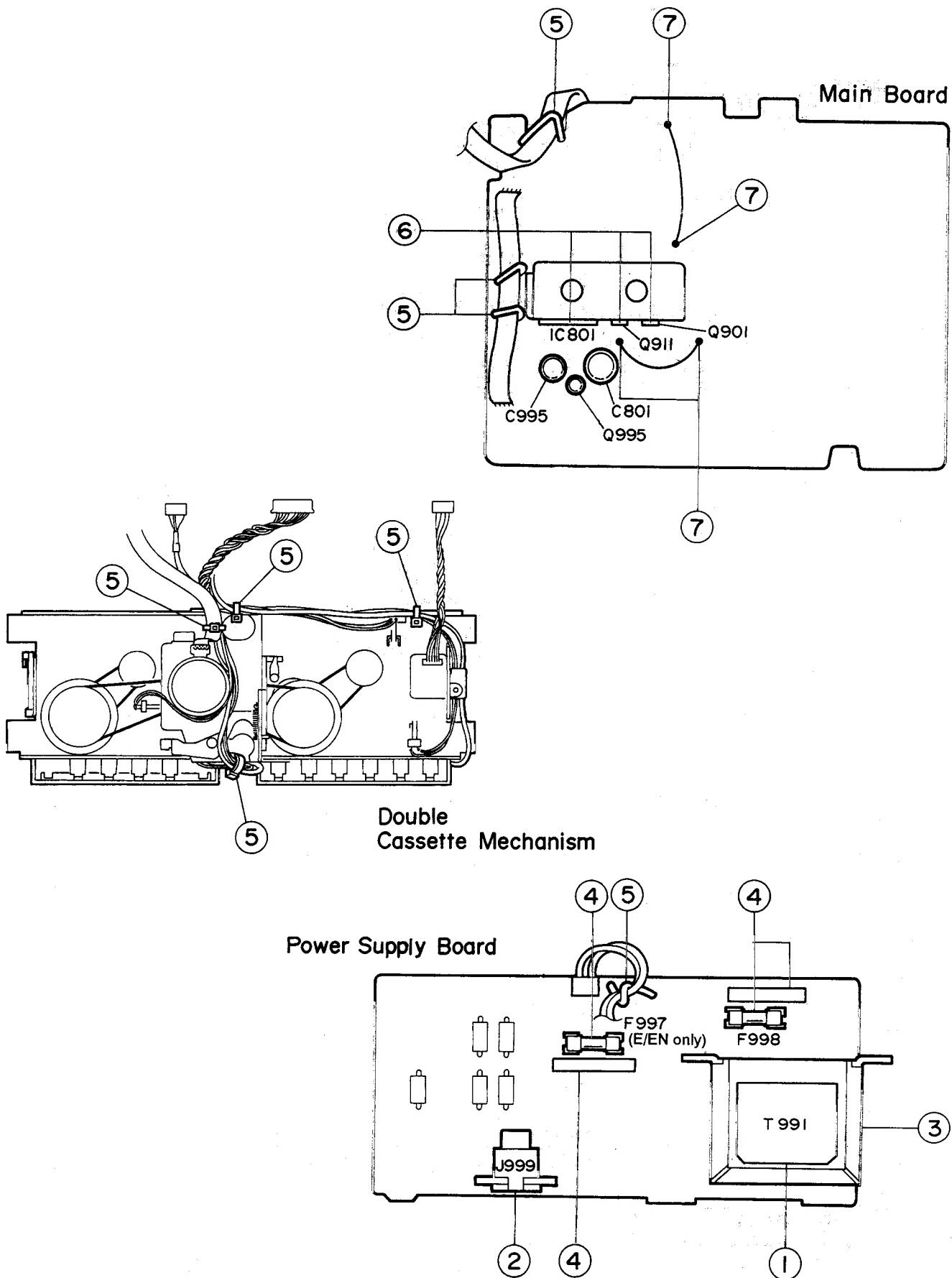
Version	REF.No.	Capacity &mark	Indication on P.C. board
	F998	3.15A /250V	3.15A /250V
E/EN	F997	3.15A /250V	3.15A /250V

5. Wires must be clamped or secured at the locations shown in the figure so that the wire do not touch to live parts, moving part, hot part, or sharp edges.

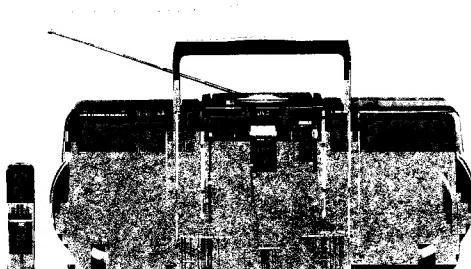
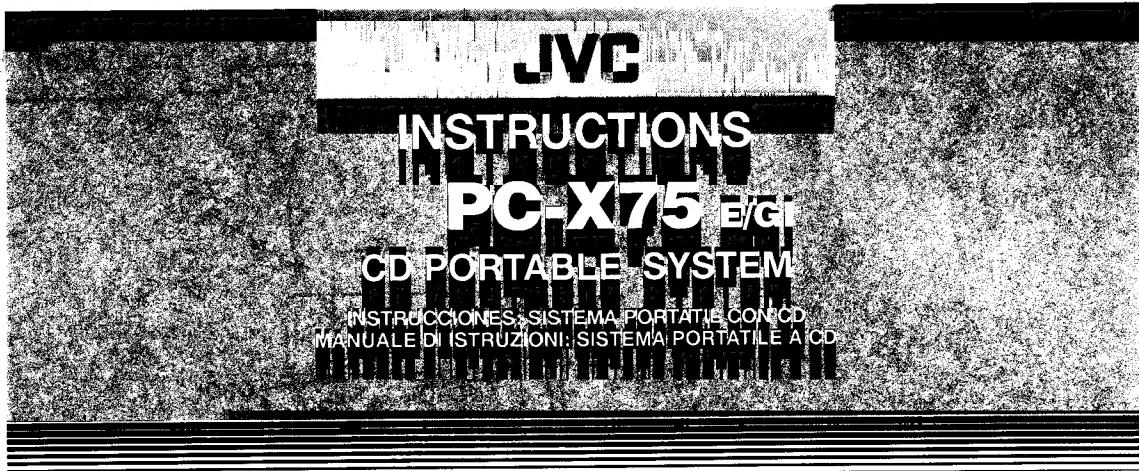
6. Following parts are controlled as the heated parts. confirm that the flammable parts are lifted up the parts in () must be controlled.

• IC : IC801, Transistor : (Q901), Q911, (Heat sink)

7. The single wire on the printed circuit board must be fixed with bond.



3. Instructions



COMPACT
disc
DIGITAL AUDIO

Thank you for purchasing this JVC product. Please read these instructions carefully before starting operation to be sure to obtain optimum performance and a longer service life from the unit.



Le agradecemos la adquisición de este producto de JVC. Por favor lea detenidamente las instrucciones antes de comenzar la operación para obtener de esta unidad un rendimiento óptimo y una vida de servicio más larga.

Grazie per avere acquistato questo prodotto JVC. Si prega di leggere queste istruzioni con attenzione prima dell'uso per essere certi di ottenere prestazioni ottimali ed una lunga durata dell'unità.

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WARNING:

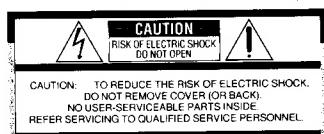
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK,
DO NOT EXPOSE THIS APPLIANCE TO RAIN OR
MOISTURE.

ADVERTENCIA:

PARA REDUCIR EL RIESGO DE INCENDIO O DE
CHOQUES ELECTRICOS, NO EXponGA ESTE
APARATO A LA LLUVIA O A LA HUMEDAD.

AVVERTENZA:

NON ESPORRE L'APPARECCHIO A PIOGGIA O
UMIDITÀ ONDE RIDURRE I RISCHI DI FIAMME O
SCOSSE ELETTRICHE.



The exclamation mark within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

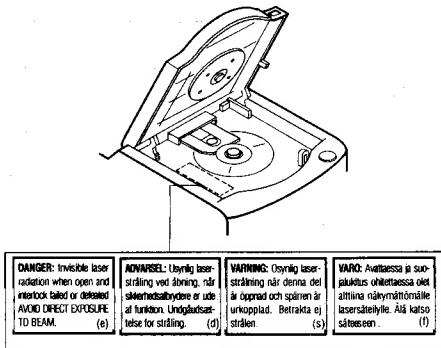
The lightning bolt symbol within an equilateral triangle is intended to alert the user to the presence of dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

IMPORTANT FOR LASER PRODUCTS

PRECAUTIONS

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5. **CAUTION:** Use of controls for adjustments and the performance of procedures other than those specified herein may result in exposure to hazardous radiation.

REPRODUCTION OF LABELS AND THEIR LOCATION

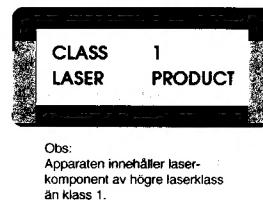


IMPORTANTE PARA PRODUCTOS LASER

PRECAUCIONES

1. PRODUCTO LASER CLASE 1
2. **PELIGRO:** Radiación láser invisible cuando se abre, falla o se desactiva el encavamiento. Evite la exposición directa al rayo.
3. **PRECAUCIÓN:** No abra la cubierta trasera. Dentro de la unidad no hay componentes que el usuario pueda reparar; deje toda reparación al personal de servicio cualificado.
4. **PRECAUCIÓN:** El reproductor de CD utiliza radiación láser invisible y está equipado con interruptores de seguridad que evitan la emisión de radiación cuando se abre el portadisco de CD o compartimiento del CD. Es peligroso desactivar los interruptores de seguridad.
5. **PRECAUCIÓN:** La utilización de los controles de ajuste y de procedimientos que no estén especificados aquí, puede resultar en exposición a radiación peligrosa.

REPRODUCCION DE ETIQUETAS Y SU UBICACION

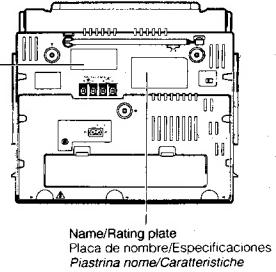


IMPORTANTI PRECAUZIONI PER PRODOTTI LASER

PRECAUZIONI

1. PRODOTTO LASER DI CLASSE 1
2. **PERICOLO:** Quando l'apparecchio è aperto ed i dispositivi di sicurezza non funzionano o sono stati disattivati, vengono prodotte invisibili radiazioni laser. Evitare l'esposizione diretta al raggio.
3. **CAUTELA:** Non aprire la copertura posteriore. All'interno dell'unità non vi sono parti che possono interessare l'utente; fare eseguire qualsiasi intervento a personale di assistenza qualificato.
4. **CAUTELA:** Il lettore CD utilizza radiazioni laser invisibili ed è fornito di interruttori di sicurezza per evitare l'emissione di tali radiazioni quando il piatto del CD è aperto. Non escludere tali interruttori di sicurezza in quanto ciò è pericoloso.
5. **CAUTELA:** L'uso di comandi e procedure diversi da quanto specificato possono risultare nell'esposizione a radiazioni pericolose.

ETICHETTE E LORO POSIZIONE



2

FEATURES

CARACTERISTICAS

CARATTERISTICHE

- Multi-function CD player with remote control
- Programmed play of up to 20 tracks
- Repeat Play
- Random Play
- Intro Play
- 8-cm (3") "CD singles" capability
- CD synchro-start recording
- Double-cassette mechanism (Deck A for recording and playback, Deck B for playback)
- Synchro-start dubbing function (normal-speed dubbing)
- Relay playback (from Deck B to Deck A)
- Full auto-stop mechanism
- Multi-Bass Horn circuit for low-frequency sound reproduction

- Reproductor de CD con funciones múltiples y controlador remoto
- Reproducción programada hasta 20 pistas
- Repetición de reproducción
- Reproducción aleatoria
- Reproducción de introducción
- Capacidad para reproducir CD simples de 8-cm
- Grabación de CD con inicio sincronizado
- Mecanismo para dos cassettes (platina A para grabación y reproducción, platina B para reproducción)
- Función de copia con inicio sincronizado (copia a velocidad normal)
- Reproducción por relevo (de la platina B a la platina A)
- Mecanismo totalmente automático de parada
- Circuito para bocina de graves múltiples para reproducción de sonidos de baja frecuencia

- Lettore CD pluri-funzioni, con telecomando
- Riproduzione programmata di fino a 20 brani
- Riproduzione ripetuta
- Riproduzione casuale
- Riproduzione degli inizi
- Capacità di riproduzione di CD singoli da 8 cm
- Registratore ad avvio sincronizzato con il lettore CD
- Mecanismo a doppia piastra (Piastra A per registrazione e riproduzione, Piastra B per sola riproduzione)
- Funzione di duplicazione ad avvio sincronizzato (duplicazione a velocità normale)
- Riproduzione continua (dalla Piastra B alla Piastra A)
- Meccanismo di arresto completamente automatico
- Circuito Multi-Bass Horn per la riproduzione di suoni a bassa frequenza

SAFETY PRECAUTIONS



Prevention of Electric Shocks, Fire Hazards and Damage

1. Even when the FUNCTION switch is set to TAPE/CD-TUNER STANDBY, a very small current will flow. To save power and for safety when not using the unit for an extended period of time, disconnect the power cord from the household AC outlet.
2. Do not handle the power cord with wet hands.
3. When unplugging from the wall outlet, always grasp and pull the plug, not the power cord.
4. Consult your nearest dealer when damage, disconnection, or contact failure affects the cord.
5. Do not bend the cord severely, or pull or twist it.
6. Do not modify the power cord in any manner.
7. To avoid accidents, do not remove screws to disassemble the unit and do not touch anything inside the unit.
8. Do not insert any metallic objects into the unit.
9. Unplug the power cord when there is a possibility of lightning.

PRECAUCIONES DE SEGURIDAD

Prevención de choques eléctricos, peligro de incendio y daños

1. Aunque el interruptor de función (FUNCTION) esté colocado en espera cinta/CD sintonizador (TAPE/CD-TUNER STANDBY), fluye una pequeña corriente eléctrica. Para ahorrar energía y por seguridad cuando no utiliza esta unidad durante un largo periodo, desconecte el cordón eléctrico del tomacorriente de CA.
2. No manipule el cordón eléctrico con las manos mojadas.
3. Cuando lo desenchufe del tomacorriente de la pared, sujetelo siempre por el enchufe, nunca por el cordón.
4. En caso de que el cordón sea afectado por daños, desconexión, o falso contacto, consulte a su agente más cercano.
5. No doble en ángulo agudo el cordón, no jale del mismo ni lo retuerza.
6. No modifique el cordón eléctrico de ninguna manera.
7. Para evitar accidentes, no extraiga los tornillos para desarmar la unidad y no toque nada dentro de la misma.
8. No inserte ningún objeto metálico dentro de la unidad.
9. Desenchufe el cordón eléctrico cuando haya posibilidad de caída de rayos.

PRECAUZIONI PER LA SICUREZZA

Prevenzione di scosse elettriche, fiamme e danni

1. Anche quando l'interruttore FUNCTION si trova sulla posizione TAPE/CD-TUNER STANDBY, una piccola quantità di corrente continua a fluire. Per risparmiare energia e per ragioni di sicurezza, scollegare il cavo dell'alimentazione dalla presa di corrente CA quando si prevede di non utilizzare l'unità per un periodo prolungato.
2. Non maneggiare il cavo di alimentazione con le mani bagnate.
3. Per scollegarsi dalla presa di rete, afferrare sempre la spina e non il cavo dell'alimentazione.
4. Consultare il rivenditore più vicino quando il cavo è danneggiato, scollegato o con contatti scadenti.
5. Non piegare eccessivamente il cavo, non tirarlo e non torcerlo.
6. Non modificare il cavo di alimentazione in alcun modo.
7. Per evitare incidenti, non rimuovere viti per smontare l'unità e non toccare alcun componente interno.
8. Non inserire alcun oggetto metallico nell'unità.
9. Scollegare il cavo di alimentazione durante temporali con fulmini.

10. If water gets inside the unit, unplug the power cord from the outlet and consult your dealer.
11. Do not block the unit's ventilation holes that allow heat to escape.
12. Do not install the unit in a badly ventilated place.
12. Since the speaker sections of this unit are detachable, be sure that each speaker is firmly connected to the main unit when carrying the unit and avoid dropping or striking it, and other forms of impact.

10. Si se introduce agua dentro de la unidad, desenchufe el cordón eléctrico del tomacorriente y consulte a su agente.
11. No bloquee los orificios de ventilación de la unidad que permiten el escape de calor.
12. Como los altavoces de esta unidad pueden ser extraídos, asegúrese de que cada altavoz esté firmemente conectado a la unidad principal y evite dejarlos caer, golpearlos o cualquier otra forma de impacto, cuando los transporta.

10. Se dell'acqua dovesse penetrare all'interno dell'unità, scollegare il cavo dell'alimentazione dalla presa di rete e consultare il proprio rivenditore.
11. Non bloccare i fori per la ventilazione dell'unità che permettono la dissipazione del calore.
12. Non installare l'unità in un luogo con ventilazione scadente.
12. Dato che i diffusori di questa unità possono essere rimossi, accertarsi che essi siano applicati correttamente quando si trasporta l'unità per evitare che cadano o che vengano urtati in qualsiasi modo.

HANDLING PRECAUTIONS



Do not use this unit in direct sunlight or leave the unit in closed automobiles (or yachts, etc.) where it would be exposed to high temperatures above 40°C (104°F).

1. Avoid installing in the following places

- Where it could be subject to vibrations.
- Where it is excessively humid, such as in a bathroom.
- Where it could be magnetized by a magnet or speaker.

2. Pay attention to dust

Be sure to close the CD holder or CD tray so that dust does not collect on the lens. Do not touch the lens.

3. Condensation

In the following cases, condensation may occur in the unit, in which case the unit may not operate correctly.

- In a room where a heater has just been switched on.
- In a place where there is smoke or high humidity.
- When the unit is moved directly from a cold to a warm room.

In these cases, set the FUNCTION switch to CD and wait 1 or 2 hours before use.

PRECAUCIONES DE MANIPULACION

No utilice esta unidad bajo la luz directa del sol ni la deje en automóviles cerrados (o yates, etc.), donde podría quedar expuesta a temperaturas superiores a 40°C.

1. Evite instalarla en los siguientes lugares

- Donde pueda ser sujeta a vibraciones.
- Donde haya humedad excesiva, tal como en un cuarto de baño.
- Donde pueda ser magnetizada por un imán o altavoz.

2. Preste atención al polvo

Asegúrese de cerrar el portadisco o compartimiento de CD para que el polvo no se deposite sobre la lente. No toque la lente.

3. Condensación

En los siguientes casos, puede producirse condensación dentro de la unidad y en consecuencia la unidad no funcionará correctamente.

- En una sala donde haya un calentador encendido.
- En un lugar donde haya humo o gran humedad.
- Cuando se traslada rápidamente la unidad de una sala fría a una templada.

En estos casos coloque el interruptor FUNCTION en CD y espere 1 o 2 horas antes de usar.

PRECAUZIONI PER L'USO

Non utilizzare questa unità nella luce solare diretta e non lasciarla in automobili chiuse (o barche, ecc.) dove possa essere esposta a temperature maggiori di 40°C.

1. Evitare l'installazione nei luoghi seguenti

- In luoghi dove l'unità può essere soggetta a vibrazioni.
- In luoghi eccessivamente umidi come una stanza da bagno.
- In luoghi dove l'unità può essere magnetizzata da un magnete o da un diffusore.

2. Fare attenzione alla polvere

Accertarsi di chiudere il piatto del CD in modo che la polvere non si raccolga sulla lente del pickup. Non toccare la lente del pickup.

3. Condensa

Nei casi seguenti della condensa si potrebbe formare nell'unità impedendo il funzionamento corretto dell'unità stessa.

- In una stanza in cui il riscaldamento è appena stato acceso.
- In un luogo fumoso o con elevata umidità.
- Quando l'unità viene spostata direttamente da una stanza fredda ad una calda.

In questi casi, portare l'interruttore FUNCTION su CD ed attendere 1 o 2 ore prima dell'uso.

4. Volume setting

CDs produce very little noise compared with analog sources. If the volume level is adjusted for these sources, the speakers may be damaged by the sudden increase of output level. Therefore, lower the volume before operation and adjust it as required during play.

5. Safety mechanism

This unit incorporates a safety interlock mechanism which switches the laser beam on and off, so that when the CD holder or CD tray is open, the laser beam stops automatically.

6. Do not place cassette tapes, etc. near the speakers

Since there are magnets in the speakers, do not place tapes or magnetic cards on them as recorded data could be erased.

7. Keep this unit away from your TV

When this unit is used near a TV, the TV picture could be distorted. If this happens, move this unit away from the TV. If this does not correct the situation, avoid using this unit when the TV is turned on.

8. Cleaning the cabinet

If the cabinet gets dirty, wipe it with a soft, dry cloth. Never use benzine or thinner as these could damage the surface finish.

9. When listening with headphones

- Do not listen at high volumes as it could damage your hearing.
- For safety, do not drive while listening to this unit.

10. Carrying handle

Do not raise or lower the carrying handle with the telescopic antenna extended, to avoid damaging the antenna. Place the carrying handle so that it does not interfere with operation.

4. Ajuste del volumen

Los productos de CD producen muy poco ruido comparados con las fuentes analógicas. Si ajusta el nivel de volumen para estas fuentes, es posible que los altavoces sean dañados por el incremento brusco del nivel de salida. Por ello, reduzca el volumen antes de la operación y ajustelo como deseé durante la reproducción.

5. Mecanismo de seguridad

Esta unidad posee un mecanismo de enclavamiento de seguridad que apaga y enciende el rayo láser de tal manera que cuando se abre el portadisco o compartimiento de CD, el rayo láser se apaga automáticamente.

6. No coloque cassettes de cinta, etc., próximos a los altavoces

Como hay imanes en los altavoces, no coloque cintas o tarjetas magnéticas sobre los mismos, ya que los datos grabados pueden ser borrados.

7. Mantenga esta unidad lejos de su TV

Cuando se usa esta unidad próxima a un TV, la imagen de este puede ser distorsionada. Si ello ocurre, mueva esta unidad lejos del TV. Si esto no corrige el problema, evite usar esta unidad cuando el TV está encendido.

8. Limpieza del gabinete

Si el gabinete se ensucia limpielo con un paño suave y seco. Nunca utilice bencina o solventes ya que estos pueden dañar la terminación de la superficie.

9. Cuando escucha con auriculares

- No escuche con volumen alto ya que esto puede dañar sus oídos.
- Por seguridad no conduzca mientras escucha esta unidad.

10. Manija para transporte

No levante ni baje la manija para transporte con la antena telescópica extendida para evitar daños de la misma. Coloque la manija para transporte de tal manera que no interfiera con la operación.

4. Impostazione del volume

I CD producono un rumore estremamente basso se confronti con fonti analogiche. Se il livello del volume fosse impostato per tali fonti, i diffusori potrebbero venire danneggiati dall'improvviso aumento del livello in uscita. Abbassare perciò il volume prima dell'uso e regolarlo quindi durante la riproduzione.

5. Mecanismo di sicurezza

Questa unità incorpora un meccanismo di sicurezza che attiva e disattiva il raggio laser in modo che quando il piatto del CD è aperto il raggio laser viene disattivato automaticamente.

6. Non posare nastri a cassetta, ecc., in prossimità dei diffusori

Dato che i diffusori incorporano dei magneti, non posare nastri registrati o schede magnetiche su di essi in quanto i materiali registrati potrebbero venire cancellati.

7. Tener l'unità lontana dal televisore

Quando questa unità viene utilizzata in prossimità di un televisore, l'immagine TV potrebbe venire distorta. Se ciò dovesse accadere, allontanare l'unità dal televisore. Se ciò non fosse sufficiente ad eliminare le interferenze, evitare di utilizzare questa unità quando il televisore è acceso.

8. Pulizia dell'esterno dell'unità

Se l'esterno dell'unità fosse sporco, strofinare con un panno morbido ed asciutto.

Non usare mai benzina o diluente in quanto essi possono danneggiare la finitura delle superfici.

9. Ascolto con le cuffie

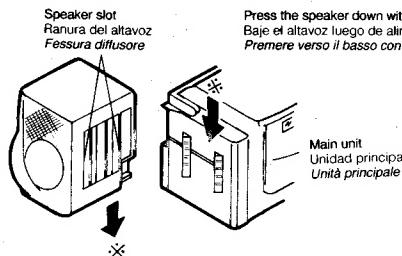
- Abbassare il volume in modo da non danneggiare le orecchie.
- Per motivi di sicurezza non guidare mentre si ascolta il suono prodotto dall'unità con le cuffie.

10. Manico di trasporto

Non sollevare o abbassare il manico per il trasporto con l'antenna telescopica estesa onde evitare di danneggiare l'antenna stessa. Sistemare il manico in modo che non interferisca con l'utilizzo dell'unità.

ATTACHING/DETACHING THE SPEAKERS

When using the speakers attached to the main unit
Align the bottom of the speaker against the top of the main unit and press down on the speaker to attach it.

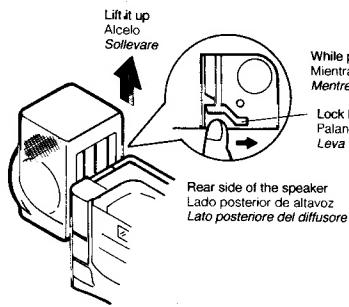


Press the speaker down with the speaker and main unit aligned.
Baje el altavoz luego de alinearla con la unidad principal.
Premere verso il basso il diffusore ed unità allineati.

FIJACION/RETIRO DE LOS ALTAVOCES

APPLICAZIONE/RIMOZIONE DEI DIFFUSORI

When using the speakers detached from the main unit
While pressing the lock lever at the rear bottom of speaker in the direction of the arrow, lift the speaker up to detach from the main unit.



While pressing the lock lever...
Mientras presiona la palanca de fijación...
Mentre si spinge la leva di fissaggio ...

CUANDO UTILIZA LOS ALTAVOCES SEPARADOS DE LA UNIDAD PRINCIPAL

Mientras presiona la palanca de bloqueo ubicada en la parte trasera de la parte inferior del altavoz en la dirección de la flecha, levante el altavoz para separarlo de la unidad principal.

Quando si utilizza l'unità con i diffusori applicati
Allineare il lato inferiore dell'altoparlante con il lato superiore dell'apparecchio principale e premere sull'altoparlante per inserirlo.

Quando si utilizza l'unità con i diffusori rimossi
Premere, nella direzione della freccia, sulla leva di bloccaggio ubicata sulla parte posteriore inferiore dell'altoparlante, e far scorrere l'altoparlante verso l'alto per staccarlo dall'apparecchio principale.

Nota:
Como los altavoces suenan diferente de acuerdo a donde sean colocados, ubíquelos con precaución para obtener un efecto óptimo dentro de la longitud de los cordones para altavoz suministrados. Se recomienda colocar los altavoces izquierdo y derecho simétricamente en relación a la unidad principal.

Note:
Since the speakers sound differently according to where they are placed, carefully place them for optimal effect within the length of the provided speaker cords. It is recommended that the left and right speakers be placed symmetrically in relation to the main unit.

6

CONNECTIONS

CONEXIONES

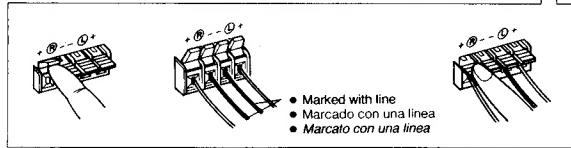
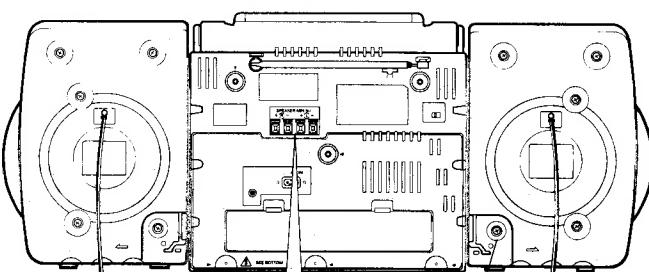
COLLEGAMENTI

• Do not switch the power on until all connections are completed.

• No conecte la alimentación hasta haber completado todas las conexiones.

• Non attivare l'alimentazione prima del completamento dei collegamenti.

• When connecting the speaker cords, connect the one marked with a line to the \ominus terminal first.
• Cuando conecte los cordones de los altavoces, conecte primero el cordón marcado con una linea al terminal \ominus .
• Quando si collegano i cavi dei diffusori, collegare per primo il cavo marcato con una linea al terminale \ominus .



* Space for speaker cords
* Espacio para los cordones de los altavoces
* Spazio per i cavi dei diffusori

* After connecting the speaker cords, bundle any slack into the space for the speaker cords in the rear panel.
* Después de conectar los cordones de los altavoces, arrolle el sobrante dentro del espacio para los cordones de los altavoces, ubicado en el panel trasero.
* Dopo aver collegato i cavi dei diffusori, inserire la parte libera dei cavi nello spazio apposito sul pannello posteriore.

POWER SUPPLY

A. Operation on household AC

- Connect the AC power cord.

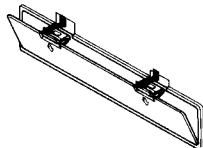
CAUTIONS:

1. ONLY USE WITH JVC POWER CORD PROVIDED WITH THIS UNIT TO AVOID MALFUNCTION OR DAMAGE TO THE UNIT. REMOVE BATTERIES WHEN USING THE POWER CORD.
2. BE SURE TO UNPLUG THE POWER CORD FROM THE OUTLET WHEN GOING OUT OR WHEN THE UNIT IS NOT IN USE FOR AN EXTENDED PERIOD OF TIME.

B. Operation on batteries

• Loading batteries

1. Open the battery cover by pulling it toward you while pressing the sections marked by the arrows.
2. Insert eight "R20/D (13F)" size batteries as shown in the diagram.
3. Replace the cover.



ALIMENTACION

A. Operación con CA en el hogar

- Conecte el cordón de CA.

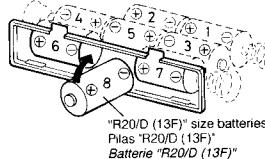
PRECAUCIONES:

1. PARA EVITAR FALLAS O DAÑOS EN LA UNIDAD UTILICE EL CORDON DE ALIMENTACION DE JVC SUMINISTRADO CON ESTA UNIDAD. PARA UTILIZAR EL CORDON DE ALIMENTACION EXTRAIGA LAS PILAS.
2. ASEGURESE DE DESENCHUFAR EL CORDON DE ALIMENTACION DEL TOMACORRIENTES CUANDO SALGA O CUANDO NO VAYA A UTILIZAR LA UNIDAD POR UN LARGO PERIODICO.

B. Operación con pilas

• Colocación de las pilas

1. Abra la tapa del compartimiento de las pilas jalándola hacia usted mientras presiona las secciones marcadas con las flechas.
2. Inserte ocho pilas de tamaño "R20/D (13F)", como se muestra en el diagrama.
 - Tome precauciones para insertar la pilas con los terminales + y - en posición correcta.
3. Coloque la tapa.



ALIMENTAZIONE

A. Collegamento del cavo di alimentazione CA

- Collegare il cavo di alimentazione CA.

PRECAUZIONI:

1. UTILIZZARE SOLO IL CAVO DI ALIMENTAZIONE JVC IN DOTAZIONE A QUESTA UNITA' PER EVITARE DISFUNZIONI O DANNI ALL'UNITA' STESSA. RIMUOVERE LE BATTERIE QUANDO SI UTILIZZA IL CAVO DI ALIMENTAZIONE.
2. ACCERTARSI DI SCOLLEGARE IL CAVO DI ALIMENTAZIONE DALLA PRESA DI RETE QUANDO SI ESCE O QUANDO SI PREVEDE DI NON UTILIZZARE L'UNITA' PER UN PERIODO PROLUNGATO.

B. Funzionamento con batterie

• Inserimento batterie

1. Aprire il coperchio del vano batterie tirandolo verso di sé mentre si preme sulle sezioni marcate dalle frecce.
2. Inserire otto batterie di formato "R20/D (13F)" come indicato in figura.
 - Fare attenzione ad inserire le batterie con i terminali + e - posizionati in modo corretto.
3. Reinserire il coperchio.

Checking batteries

When the tape speed or output sound decreases, or CD play is intermittent, replace all batteries with fresh ones. When making an important recording, use new batteries (preferably alkaline batteries with a longer service life) to avoid any possible failure.

• For better battery usage

Continuous operation of the unit causes the battery power to be consumed quicker than noncontinuous operation.

Operation of the unit in a cold place causes the battery power to be consumed more quickly than in a warm place.

CAUTIONS:

- WHEN NOT USING THE UNIT FOR A LONG TIME (MORE THAN TWO WEEKS) OR WHEN ALWAYS USING HOUSEHOLD AC, REMOVE THE BATTERIES TO AVOID A MALFUNCTION OR DAMAGE TO THE UNIT.
- WHEN THE JVC POWER CORD PROVIDED WITH THIS UNIT IS CONNECTED, THE POWER IS AUTOMATICALLY SWITCHED FROM THE BATTERIES TO THE HOUSEHOLD AC EVEN WHEN THE BATTERIES ARE LOADED. HOWEVER, REMOVE THE BATTERIES WHEN USING THE POWER CORD.

CAUTIONS WHEN USING BATTERIES

When batteries are used incorrectly, it may result in the leakage of chemicals from the batteries or they may explode. The following care should be taken:

- Check that the positive + and negative - terminals of the batteries are positioned correctly and load them as shown in the diagram.
- Do not mix new and old batteries together, or mix different types of batteries.
- Do not try to recharge non-rechargeable batteries.
- Remove the batteries when the unit is not to be used for an extended period of time.

If chemicals from the batteries come in contact with your skin, wash them off immediately with water. If chemicals leak onto the unit, clean the unit completely.

Comprobación de las pilas

Si la velocidad de la cinta o la salida de sonido se reduce, o si la reproducción de CD es intermitente, reemplace todas las pilas por nuevas.

Cuando efectúe grabaciones importantes, utilice pilas nuevas (preferiblemente alcalinas con una vida útil más larga), para evitar cualquier falla posible.

• Para una mejor utilización de las pilas

Si este aparato se utiliza continuamente, las pilas se gastarán más rápido que si se utiliza de vez en cuando. Si se utiliza en un lugar frío, las pilas se consumirán más rápidamente que si se utiliza en un lugar cálido.

PRECAUCIONES:

- SI NO VA A UTILIZAR LA UNIDAD DURANTE LARGO TIEMPO (MAS DE DOS SEMANAS), O CUANDO UTILICE CA DEL HOGAR, EXTRAIGA LAS PILAS PARA EVITAR FALLAS DE FUNCIONAMIENTO O DANOS A LA UNIDAD.
- CUANDO SE CONECTA EL CORDON DE ALIMENTACION DE JVC DE ESTA UNIDAD, LA ALIMENTACION CONMUTA AUTOMATICAMENTE DE LAS PILAS A CA AUN CUANDO LAS PILAS ESTEN COLOCADAS. SIN EMBARGO RECOMENDAMOS QUE EXTRAIGA LAS PILAS CUANDO UTILIZA EL CORDON DE ALIMENTACION.

PRECAUCIONES PARA EL USO DE LAS PILAS

Si las pilas son incorrectamente usadas, ello puede resultar en fugas de productos químicos de las mismas pueden explotar. Es necesario tomar las siguientes precauciones:

- Verifique que los terminales + y negativos - de las pilas estén correctamente colocados de acuerdo al diagrama.
- No mezcle pilas nuevas y viejas, ni mezcle diferentes tipos de pilas.
- No intente recargar las pilas que no sean recargables.
- Extraiga las pilas cuando no vaya a utilizar la unidad durante un largo periodo.

Si los productos químicos provenientes de las pilas entran en contacto con su piel, lávelse inmediatamente con agua. Si los productos químicos caen sobre esta unidad, límpielas completamente.

Controllo batterie

Quando la velocità del nastro o il suono in uscita diminuiscono oppure quando la riproduzione del CD è intermitente, sostituire tutte le batterie con altre di nuove. Quando si eseguono registrazioni importanti, utilizzare batterie nuove (preferibilmente batterie alcaline di maggiore durata) per evitare qualsiasi problema.

- Per un migliore utilizzo delle batterie

L'uso continuo dell'unità scarica le batterie più velocemente di un uso saltuario.

L'uso dell'unità in un luogo freddo scarica le batterie più rapidamente che in un luogo caldo.

PRECAUZIONI:

- QUANDO NON SI UTILIZZA L'UNITA' PER UN LUNGO PERIODO DI TEMPO (PIU' DI DUE SETTIMANE) OPPURE QUANDO SI UTILIZZA SEMPRE L'ALIMENTAZIONE DI RETE CA, RIMUOVERE LE BATTERIE PER EVITARE DISFUNZIONI O DANNI ALL'UNITA'.
- QUANDO IL CAVO DI ALIMENTAZIONE JVC IN DOTAZIONE A QUESTA UNITA' VIENE COLLEGATO, L'ALIMENTAZIONE VIENE COMMUTATA AUTOMATICAMENTE DALLE BATTERIE ALLA RETE CA ANCHE QUANDO LE BATTERIE SONO INSERITE. RIMUOVERE COMUNQUE LE BATTERIE QUANDO SI UTILIZZA IL CAVO DI ALIMENTAZIONE.

PRECAUZIONI PER L'USO DELLE BATTERIE

Se le batterie vengono utilizzate in modo scorretto, si possono verificare perdite di sostanze chimiche o esplosioni. Osservare le precauzioni seguenti:

- Controllare che i terminali positivo + e negativo - delle batterie siano posizionati correttamente ed inserire le batterie come indicato.
- Non mescolare batterie vecchie e nuove oppure tipi di batteria diversi.
- Non provare a ricaricare batterie non ricaricabili.
- Rimuovere le batterie quando si prevede di non utilizzare l'unità per un periodo di tempo prolungato.

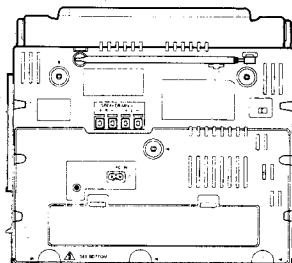
Se sostanze chimiche delle batterie entrassero in contatto con la pelle, lavare immediatamente con acqua. Se le sostanze chimiche entrassero in contatto con l'unità, lavare completamente l'unità stessa.

C. Operation on car battery (DC 12 V)
(PC-X75E only)



C. Funcionamiento con la batería del automóvil
(CC 12 V)
(PC-X75E exclusivamente)

C. Funzionamento con la batteria di una vettura
(CC 12 V)
(Solo PC-X75E)



- First connect the car adaptor to the DC IN 12 V jack, not the cigarette lighter socket, because shorting of a plug on the car may cause the fuse to blow out. In addition, be careful not to make a short-circuit between the plugs.
- When using a car battery, be sure to use the specified car adaptor (JVC model CA-R120E) to prevent mishaps or damage resulting from different polarity design.**

- Primeramente conecte el adaptador para automóvil en el jack DC IN 12 V, no conecte el enchufe para el encendedor de cigarrillos porque el corto del enchufe del automóvil puede hacer que se queme un fusible. Además, tome precauciones para hacer un cortocircuito entre enchufes.
- Cuando utiliza la batería del automóvil asegúrese de utilizar el adaptador especificado para el vehículo (modelo CA-R120E de JVC), para evitar fallas o errores que resulten del diseño diferente de polaridades.

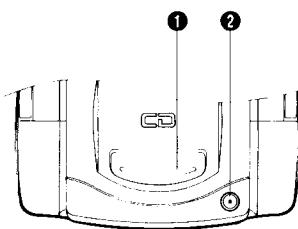
- Collegare prima l'alimentatore alla presa DC IN 12V e non alla presa dell'accendisigari in quanto un cortocircuito nella vettura potrebbe far saltare il fusibile. Inoltre, fare attenzione a non mettere in cortocircuito le prese.
- Quando si utilizza la batteria di una vettura per l'alimentazione, accertarsi di utilizzare l'alimentatore specificato (modello JVC CA-R120E) onde evitare danni derivanti da polarità differenti.

NAMES OF PARTS AND THEIR FUNCTIONS

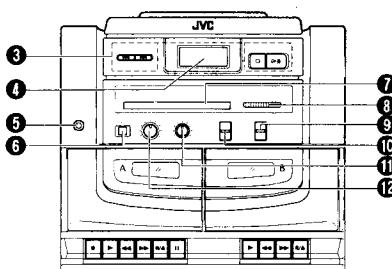
NOMBRES DE LAS PARTES Y SUS FUNCIONES

NOMI E FUNZIONI DELLE PARTI

Top panel
Panel superior
Pannello superiore

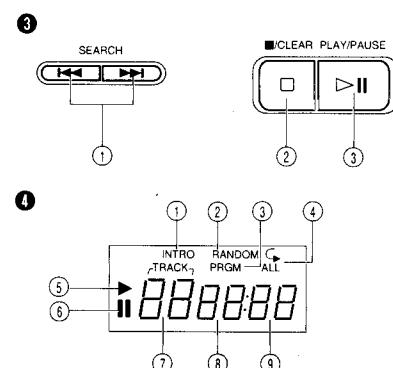


Front panel
Panel frontal
Pannello anteriore



- CD holder
- CD holder open (▲) button
- CD operation buttons
 - SEARCH (◀◀, ▶▶) buttons
 - Stop (■)/CLEAR button
 - Play/pause (▷ II) button
- Display window (CD player section)
 - INTRO scan indicator
 - RANDOM play indicator
 - Program mode indicator (PRGM)
 - Repeat play indicator (◀ ALL)
 - Playback indicator (▶)
 - Pause indicator (II)
 - Track number display
 - Time (minute)/Program order number display
 - Time (second) display

- Compartimiento del CD
- Botón (▲) de apertura del compartimiento de CD
- Botones para operación del CD
 - Botones de búsqueda (◀◀, ▶▶) (SEARCH)
 - Botón de parada/borrado (■/CLEAR)
 - Botón (▷ II) de reproducción/pausa
- Visor de indicación (sección del reproductor de CD)
 - Indicador de búsqueda de la introducción (INTRO)
 - Indicador de reproducción aleatoria (RANDOM)
 - Indicador (PRGM) de modo de programa
 - Indicador de repetición de reproducción total (◀ ALL)
 - Indicador (▶) de reproducción
 - Indicador (II) de pausa
 - Indicación del número de pista
 - Indicación de la hora (minutos)/número de orden del programa
 - Indicación de la hora (segundos)



- Vano CD
- Tasti apertura vano CD (▲)
- Tasti funzionamento lettore CD
 - Tasto SEARCH (◀◀, ▶▶)
 - Tasto arresto/cancellazione (■/CLEAR)
 - Tasto riproduzione/pausa (▷ II)
- Finestrella display (sezione lettore CD)
 - Indicatore scansione brani (INTRO)
 - Indicatore riproduzione casuale (RANDOM)
 - Indicatore modo programmazione (PRGM)
 - Indicatore riproduzione ripetuta (◀ ALL)
 - Indicatore di riproduzione (▶)
 - Indicatore di pausa (II)
 - Indicazione del numero di brano
 - Indicazione di tempo (minuti)/numero di ordine nel programma
 - Indicazione di tempo (secondi)

⑤ Headphones jack (PHONES) (3.5 mm dia. stereo mini)
Connect headphones (impedance 16 Ω to 1 kΩ) to this jack. Speaker sound is automatically switched off when the headphones are connected.

⑥ MULTI-BASS HORN button
on (—): Set to this position when listening to MULTI-BASS HORN sound.
off (■): Set to this position when MULTI-BASS HORN sound is not required.

⑦ Dial scale

⑧ TUNING knob

⑨ BAND switch
FM MONO: Set to this position when FM stereo reception is obscured by noise.
FM STEREO: Set to this position to listen to or record an FM stereo broadcast.
MW: Set to this position to listen to or record an MW broadcast.
LW: Set to this position to listen to or record an LW broadcast.

⑩ FUNCTION switch
CD: Set to this position when listening to or recording from a CD.
TUNER: Set to this position when listening to or recording from the radio.
TAPE/CD-TUNER STANDBY: Set to this position when listening to a cassette or when switching off the CD and TUNER mode.

⑪ TONE control knob

⑫ VOLUME control knob

⑤ Jack de auriculares (PHONES) (mini estéreo de 3.5 mm. de diámetro)
Conecte los auriculares (impedancia de 16 Ω a 1 kΩ) a esta jack. El sonido de los altavoces se apaga automáticamente cuando se conectan los auriculares.

⑥ Botón MULTI-BASS HORN
activado (—): Colóquelo en esta posición para escuchar los sonidos MULTI-BASS HORN.
desactivado (■): Colóquelo en esta posición si no desea escuchar los sonidos MULTI-BASS HORN.

⑦ Escala de cuadrante

⑧ Perilla (TUNING) de sintonización

⑨ Comutador BAND
FM MONO: Colóquelo en esta posición cuando la recepción estereofónica de FM presente ruido.
FM STEREO: Colóquelo en esta posición para escuchar o para grabar un programa estereofónico de FM.
MW: Colóquelo en esta posición para escuchar o para grabar programas de OM.
LW: Ajuste en esta posición para escuchar o grabar una radioemisión por OL.

⑩ Interruptor de función (FUNCTION)
CD: Colóquelo en esta posición para escuchar o grabar de un CD.
Sintonizador (TUNER): Colóquelo en esta posición para escuchar o grabar de la radio.
Espera de Cinta/CD-sintonizador (TAPE/CD-TUNER STANDBY): Colóquelo en esta posición para escuchar un cassette o para desactivar el modo CD y TUNER.

⑪ Perilla de control de tono (TONE)

⑫ Perilla de control VOLUME

⑤ Presa cuffie (PHONES) (mini stereo da 3,5 mm di diametro)
Collegare le cuffie (impedenza da 16 Ω a 1 kΩ) a questa presa. Il suono dei diffusori viene eliminato automaticamente quando le cuffie vengono collegate.

⑥ Tasto MULTI-BASS HORN
ON (—):
Usare questa posizione per impostare il modo MULTI-BASS HORN.
OFF (■):
Usare questa posizione per disattivare il modo MULTI-BASS HORN.

⑦ Scala delle frequenze

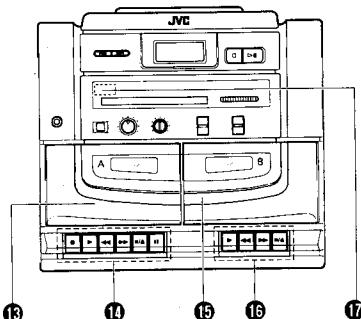
⑧ Manopola di sintonia (TUNING)

⑨ Interruttore di banda (BAND)
FM MONO: Regolarlo su questa posizione quando la ricezione FM stereo è oscurata da disturbi.
FM STEREO: Regolarlo su questa posizione per ascoltare o registrare trasmissioni FM stereo.
MW: Regolarlo su questa posizione per ascoltare o registrare trasmissioni MW.
LW: Regolarlo su questa posizione per ascoltare o registrare trasmissioni LW.

⑩ Interruttore di funzione (FUNCTION)
CD: Regolarlo su questa posizione per ascoltare o registrare compact disc.
TUNER: Regolarlo su questa posizione per ascoltare o registrare le trasmissioni radio.
TAPE/CD-TUNER STANDBY: Regolarlo su questa posizione per ascoltare le cassette o per disattivare il modo CD e TUNER.

⑪ Comando di tono (TONE)

⑫ Manopola di comando del volume (VOLUME)



⑬ Cassette holder (Deck A)
⑭ Cassette operation buttons
⑮ REC: Press this button with the ► PLAY button to start recording.
► PLAY: Press to play the tape.
◀ REW: Press to rewind the tape rapidly.
► FF: Press to wind the tape forward rapidly.
■/▲ STOP/EJECT: Press to stop the tape. Pressing this button when the tape has stopped opens the cassette holder.
■ PAUSE: Press to stop the tape temporarily. Press again to release the pause mode.

⑯ Cassette holder (Deck B)
⑰ Cassette operation buttons
► PLAY: Press to play the tape.
◀ REW: Press to rewind the tape rapidly.
► FF: Press to wind the tape forward rapidly.
■/▲ STOP/EJECT: Press to stop the tape. Pressing this button when the tape has stopped opens the cassette holder.

⑱ REMOTE SENSOR section

⑬ Vano portacassette (Piatra A)
⑭ Tasti funzionamento cassette
○ REC: Premere questo tasto assieme a quello ► PLAY per dare inizio alla registrazione.
► PLAY: Premere questo tasto per riprodurre un nastro.
◀ REW: Premere questo tasto per riaffogliere un nastro.
► FF: Premere questo tasto per fare avanzare rapidamente un nastro.
■/▲ STOP/EJECT: Premere questo tasto per arrestare il nastro. Premendo questo tasto ad apparecchio fermo si apre il vano portacassette.
■ PAUSE: Premere questo tasto per fermare temporaneamente il nastro. Premarlo di nuovo per abbandonare il modo di pausa.

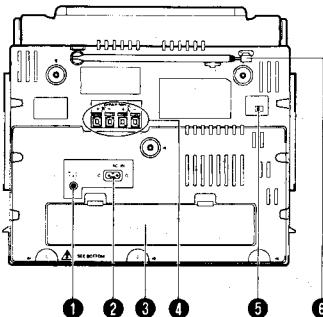
⑮ Vano portacassette (Piatra B)
⑯ Tasti funzionamento cassette
► PLAY: Premere questo tasto per riprodurre un nastro.
◀ REW: Premere questo tasto per riaffogliere un nastro.
► FF: Premere questo tasto per fare avanzare rapidamente un nastro.
■/▲ STOP/EJECT: Premere questo tasto per arrestare il nastro. Premendo questo tasto ad apparecchio fermo si apre il vano portacassette.

⑰ Sezione sensore telecomando (REMOTE SENSOR)

Rear panel

Panel trasero

Pannello posteriore



- ① DC IN 12 V jack (PC-X75E only)
- ② AC IN (AC input) jack
- ③ Battery compartment cover
- ④ SPEAKER terminals
Connect the provided speakers to these terminals.
- ⑤ BEAT CUT switch (See page 31.)
- ⑥ Telescopic antenna

- ① Jack DC IN 12 V (PC-X75E solo)
- ② Jack AC IN (Entrada de CA)
- ③ Tapa del compartimento de las pilas
- ④ Terminales de los altavoces (SPEAKER)
Conecte a estos terminales los altavoces suministrados.
- ⑤ Selector BEAT CUT (Ver página 31.)
- ⑥ Antena telescópica

- ① Presa di ingresso alimentazione CC (DC IN 12 V) (solo PC-X75E)
- ② Presa AC IN (Ingresso corrente alternata)
- ③ Coperchio vano batterie
- ④ Terminali SPEAKER
Collegare i diffusori forniti in dotazione a questi terminali.
- ⑤ Interruttore di taglio battimento (BEAT CUT) (Vedi pag. 31.)
- ⑥ Antenna telescopica

14

REMOTE CONTROL UNIT

UNIDAD DE CONTROL REMOTO

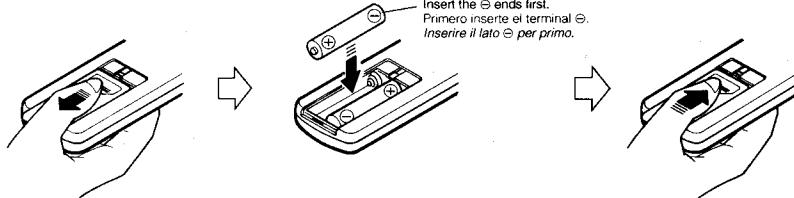
UNITA' DI TELECOMANDO

Preparation before use

- **Installing batteries in the remote control unit**
 1. Remove the battery cover from the back of the remote control unit.
 2. Insert two "R6/AA (15F)" size batteries.
 - Insert the batteries with the \oplus and \ominus terminals matching the indication inside the battery compartment.

Preparativos antes usarla

- **Instalación de las pilas en la unidad de control remoto**
 1. Extraiga la tapa de las pilas de la parte trasera de la unidad de control remoto.
 2. Inserte dos pilas de tamaño "R6/AA (15F)".
 - Inserte las pilas con los terminales \oplus y \ominus de acuerdo a la indicación en el interior del compartimento de las pilas.



3. Replace the cover.

• **Battery replacement**

When the remote control operation becomes unstable or the distance from which remote control is possible decreases, replace the batteries.

3. Recoloque la tapa.

• **Reemplazo de las pilas**

Cuando el funcionamiento del controlador remoto se vuelve inestable o la distancia dentro de la cual actúa se reduce, reemplace las pilas.

Preparativi prima dell'uso

- **Installazione delle batterie nel telecomando**
 1. Rimuovere il coperchio del vano batterie dal retro del telecomando.
 2. Inserire due batterie di formato "R6/AA (15F)".
 - Inserire le batterie con i terminali \oplus e \ominus orientati come indicato all'interno del vano stesso.

3. Reinstallare il coperchio.

• **Sostituzione batterie**

Quando il funzionamento dell'unità di telecomando è instabile oppure quando la distanza utile diminuisce, sostituire le batterie.

Using the remote control unit

- Point at the REMOTE SENSOR and operate within about 7 m (approx. 23 ft).
- The remote control range is less when the unit is used at an angle.
- Do not expose the REMOTE SENSOR to strong direct sunlight or artificial lighting.
- Make sure that there are no obstacles between the REMOTE SENSOR and the unit.

Utilización de la unidad de control remoto

- Apúntela hacia el sensor remoto (REMOTE SENSOR) y hágala funcionar dentro de un radio de 7 m. aprox.
- El radio de acción del controlador remoto es menor cuando se lo apunta en ángulo.
- No exponga el REMOTE SENSOR a la luz directa del sol o a fuerte iluminación artificial.
- Asegúrese de que no hayan obstáculos entre el REMOTE SENSOR y el controlador remoto.

Uso dell'unità di telecomando

- Utilizzare l'unità di telecomando entro una distanza di circa 7 metri puntandola verso la sezione REMOTE SENSOR.
- Il campo di funzionamento dell'unità di telecomando è inferiore se essa viene utilizzata da una posizione angolare.
- Non esporre la sezione REMOTE SENSOR a luce naturale o artificiale intensa.
- Accertarsi che non vi siano ostacoli tra la sezione REMOTE SENSOR e l'unità di telecomando.

The following operations can be performed using the remote control unit.

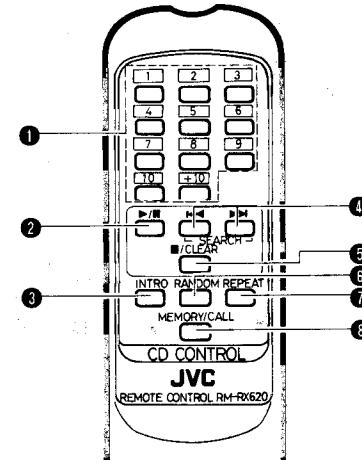
- Check the operation button functions carefully and operate them correctly.

Las siguientes operaciones deben ser ejecutadas utilizando la unidad de control remoto.

- Compruebe detalladamente el funcionamiento de los botones de operación y opérelos correctamente.

Le operazioni seguenti possono essere eseguite utilizzando l'unità di telecomando.

- Controllare con attenzione le funzioni dei tasti ed utilizzare quest'ultimi in modo corretto.



- Track number buttons (No. 1 to No. 10, +10)
- Play/pause (▶/■) button
- INTRO scan button
- SEARCH (◀◀, ▶▶) buttons
- Stop (■)/CLEAR button
- RANDOM play button
- REPEAT play button
- MEMORY/CALL button

- Botones (No. 1 a No. 10, +10) de número de pista
- Botón (▶/■) de reproducción/pausa
- Botón de búsqueda de introducción (INTRO)
- Botones de búsqueda (◀◀, ▶▶) (SEARCH)
- Botón de parada/borrado (■/CLEAR)
- Botón de reproducción aleatoria (RANDOM)
- Botón de repetición de reproducción (REPEAT)
- Botón de memoria/llamada (MEMORY/CALL)

- Tasti numeri di brano (dal No. 1 al No. 10, +10)
- Tasto riproduzione/pausa (▶/■)
- Tasto di esplorazione degli inizi (INTRO)
- Tasti ricerca (SEARCH) (◀◀, ▶▶)
- Tasto arresto/cancellazione (■/CLEAR)
- Tasto riproduzione casuale (RANDOM)
- Tasto riproduzione ripetuta (REPEAT)
- Tasto di memorizzazione e richiamo (MEMORY/CALL)

HANDLING CDs

Since dirty, damaged and warped CDs may damage the unit, take care regarding the following:

- Usable CDs**
Use CDs with the mark shown.
- Notes on handling CDs**
 - Do not touch the reflective recorded surface.
 - Do not stick or write anything on the label side.
 - Do not bend CDs.
- Storage**
 - After removing a CD from the unit, be sure to put it back in its case.
 - Do not expose CDs to direct sunlight, high temperatures from a heater, etc., high humidity, or dust.
- Cleaning CDs**
 - Before loading a CD, wipe off any dust, dirt or fingerprints with a soft cloth. CDs should be cleaned by wiping radially from the center to the edge.
- Never use thinner, benzine, record cleaner or antistatic spray.**

MANIPULACION DE CD

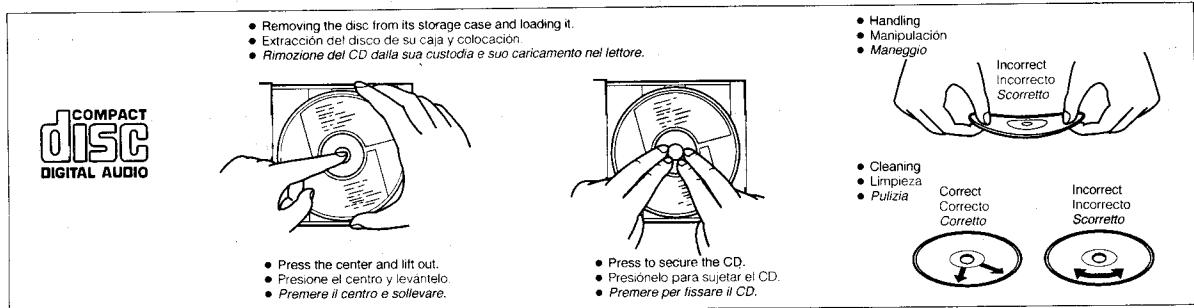
Como los CD sucios, dañados o alabeados pueden dañar la unidad, tome precauciones en relación a lo siguiente:

- CD utilizables**
Utilice CD con la marca indicada.
- Notas sobre manipulación de CD**
 - No toque la superficie grabada reflejante.
 - No adhiera ni escriba nada sobre el lado de la etiqueta.
 - No doble los CD.
- Almacenamiento**
 - Después de extraer un CD de la unidad, asegúrese de colocarlo otra vez en su caja.
 - No exponga los CD a la luz directa del sol, altas temperaturas provenientes de un calentador, etc., alta humedad, o polvo.
- Limpieza de CD**
 - Antes de colocar un CD, límpie el polvo, suciedad o huellas digitales, con un paño suave. Los CD deben ser limpiados radialmente desde el centro hacia el borde.
 - Nunca utilice solvente, bencina, limpiador de discos o aerosol antiestático.

MANEGGIO DEI CD

Dato che CD sporchi, danneggiati o deformati possono danneggiare l'unità, fare attenzione a quanto segue:

- CD utilizzabili**
Utilizzare solo CD recanti il marchio indicato.
- Note sul maneggio dei CD**
 - Non toccare la superficie registrata iridescente.
 - Non incollare o scrivere alcunché sul lato etichettato.
 - Non piegare i CD.
- Conservazione**
 - Dopo aver rimosso un CD dall'unità, accertarsi di riporlo nella sua custodia.
 - Non esporre i CD alla luce solare diretta, a temperature elevate, ad umidità elevate o a polvere.
- Pulizia CD**
 - Prima di inserire un CD, pulire polvere, sporco o impronte digitali con un panno morbido. I CD devono essere puliti strofinando radialmente, dal centro verso il bordo.
- Non utilizzare mai diluente, benzina, liquido pulente per dischi o spray antistatici.**



PLAYING CDs



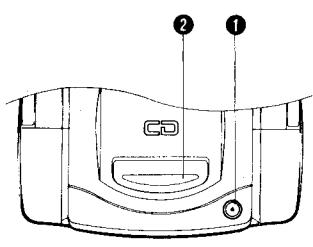
REPRODUCCION DE CD

RIPRODUZIONE DI CD

Playing an entire CD

The following example of playing an entire CD assumes a CD with 12 tracks and a total playing time of 48 minutes 57 seconds.

Operate in the order shown

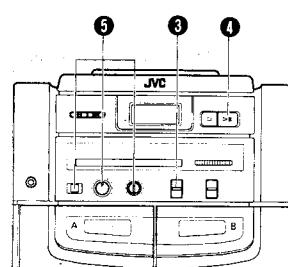


- 1 Press to open the CD holder.
- 2 Load a CD with the label side facing up and close the CD holder.
- 3 Set to the CD mode.
- 4 When a CD is first loaded, the total number of tracks and total playing time are displayed.

Reproducción de un CD completo

El siguiente ejemplo de reproducción de un CD completo supone que se ha colocado un CD con 12 pistas y un tiempo total de reproducción de 48 minutos y 57 segundos.

Operar en el orden mostrado

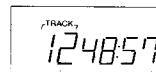
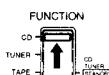


Riproduzione di un intero CD

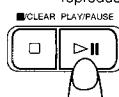
L'esempio seguente per la riproduzione di un intero CD considera un CD con 12 brani ed un tempo di riproduzione totale di 48 minuti e 57 secondi.

Eseguire le operazioni nell'ordine indicato

- 1 Press to start play.
• The track number and playback time are displayed.



- 1 Presione para iniciar la reproducción.
• La unidad indica el número de pista y el tiempo de reproducción.



④ Ajuste.

- 1 Premere il tasto per aprire il piatto del CD.
- 2 Inserire un CD col lato etichettato e quindi chiudere il piatto del CD.
- 3 Impostare il modo del lettore CD.
- 4 Quando viene inserito un CD, sul display viene visualizzato il numero totale dei brani ed il tempo di riproduzione totale.

- 1 Premere il tasto di riproduzione.
• Il numero di brano e il tempo di riproduzione sono visualizzati.

⑤ Regolare.

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- 8-cm (3") CDs can be used in this unit without an adapter.

- Los CD de 8-cm. pueden ser usados con esta unidad sin necesidad de adaptador.

- La riproduzione di CD da 8 cm non richiede l'uso di alcun adattatore.

Skip play

- During play, it is possible to skip forward to the beginning of the next track or back to the beginning of the track being played or the previous track; when the beginning of the required track has been located, play starts automatically.

To listen to the next track...

Press the **▶▶** button once to skip to the beginning of the next track.

To listen to the previous track...

Press the **◀◀** button to skip to the beginning of the track being played. Press twice quickly to skip to the beginning of the previous track.

Search play (to locate the required position on the CD)

- The required position can be located using fast-forward or reverse search while playing a CD.

Reproducción con salto

- Durante la reproducción es posible saltar hacia adelante hasta el principio de la próxima pista o hacia atrás hasta el principio de la pista que está siendo reproducida o de la pista anterior; cuando haya localizado el principio de la pista deseada, la reproducción se inicia automáticamente.

Para escuchar la próxima pista...

Presione una vez el botón **▶▶** para saltar al principio de la próxima pista.

Para escuchar la pista anterior...

Presione el botón **◀◀** para saltar al principio de la pista que está siendo reproducida. Presínelo dos veces rápidamente para saltar al principio de la pista anterior.

Riproduzione con salto

- Durante la riproduzione è possibile saltare all'inizio del brano successivo oppure all'inizio del brano in corso di riproduzione o di un brano precedente; la riproduzione inizia automaticamente quando l'inizio del brano desiderato viene raggiunto.

Per ascoltare il brano successivo...

Premere una volta il tasto **▶▶** per saltare all'inizio del brano successivo.

Per ascoltare il brano precedente...

Premere il tasto **◀◀** per saltare all'inizio del brano in corso di riproduzione. Premerlo due volte in rapida successione per saltare all'inizio del brano precedente.

Riproduzione con ricerca (per localizzare una determinata posición sul CD)

- La posición deseada puede ser ubicada utilizando la búsqueda de avance rápido o invertida mientras reproduce un CD.

Keep pressing for fast-reverse search.
Mantenga presionado para la búsqueda regresiva rápida.
Tenere premuto per la ricerca rapida all'indietro.



Keep pressing for fast-forward search.
Mantenga presionado para la búsqueda progresiva rápida.
Tenere premuto per la ricerca rapida in avanti.

- Hold down the button; search play starts slowly and then gradually increases in speed.

- Since low-volume sound (at about one quarter of the normal level) can be heard in the search mode, monitor the sound and release the button when the required position is located.

- Mantenga presionado el botón; la búsqueda con reproducción se inicia lentamente y luego aumenta gradualmente la velocidad.

- Como en el modo de búsqueda es posible escuchar el sonido a bajo volumen (aproximadamente a un cuarto del nivel normal), monitoree el sonido y suelte el botón cuando haya localizado la posición deseada.

- Tenere premuto il tasto; la riproduzione con ricerca inizia lentamente e quindi aumenta gradualmente di velocità.

- Dato che il suono può essere udito a basso volume (circa un quarto del livello normale) nel modo di ricerca, ascoltare e rilasciare il tasto quando la posizione desiderata viene raggiunta.

To stop play**To stop in the middle of a CD**

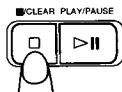
During play, press the ■/CLEAR button to stop play.

**To stop a CD temporarily**

Press the ▶/II button to stop play temporarily. When pressed again, play resumes from the point where it was paused.

**Caution:**

To change CDs, press the ■/CLEAR button; check that the CD has stopped rotating completely before unloading it.

**Notes:**

- The following indication may appear when a CD is dirty or scratched, or when the CD is loaded upside down. In such a case, check the CD and insert again after cleaning the CD or turning it over.



- Do not use the unit at excessively high or low temperatures. The recommended temperature range is from 5°C (41°F) to 35°C (95°F).
- After play, unload the CD.
- If mistracking occurs during play, lower the volume.
- Mistracking may occur if a strong shock is applied to the unit or if it is used in a place subject to vibrations (i.e. in a car travelling on a rough road).

Direct access play (using the remote control unit)

- Pressing any of the track number buttons will start play from the beginning of the designated track without you having to press the ▶/II button. (This function cannot be used during programmed play.)

Para detener la reproducción**Para detener la reproducción de un CD en la mitad de la misma**

Presione el botón ■/CLEAR para detener la reproducción.

Per interrompere la riproduzione**Per l'interruzione nel mezzo di un CD**

Premere il tasto ■/CLEAR per interrompere la riproduzione nel mezzo.

Per interrompere temporaneamente la riproduzione di un CD

Premere il tasto ▶/II interrompere temporaneamente la riproduzione di un CD. Quando il tasto viene premuto nuovamente, la riproduzione riprende dal punto in cui è stata interrotta.

Para detener un CD temporalmente

- Para detener la reproducción temporalmente presione el botón ▶/II. Si lo presiona otra vez, la reproducción continuada en el punto en que la detuvo.

**Precaución:**

- Para cambiar CD, presione el botón ■/CLEAR; compruebe que el CD haya parado de girar antes de extraerlo.

Precauzioni:

- Per cambiare i CD, premere il tasto arresto/cancellazione (■/CLEAR) controllare che il CD abbia smesso completamente di girare prima di estrarlo.

Notas:

- La siguiente indicación puede aparecer cuando el CD esté sucio o rayado, o cuando se lo ha colocado al revés. En tal caso, inspeccione el CD y colóquelo otra vez después de limpiarlo o de girarlo.

Note:

- L'indicazione seguente potrebbe apparire quando un CD è sporco o graffiato oppure quando il CD viene inserito rovescio. In tali casi, controllare il CD e quindi reinserirlo dopo averlo pulito o voltato.

- No utilice la unidad en temperaturas excesivamente altas o bajas. Los límites de temperatura recomendados son de 5 a 35°C.
- Después de la reproducción extraiga el CD.
- Si ocurre un error de seguimiento durante la reproducción, baje el volumen.
- Los errores de seguimiento pueden ocurrir si la unidad recibe un choque fuerte o si se la usa en un lugar sujeto a vibración (e.g.: un automóvil en marcha en una carretera irregular).

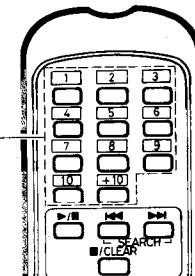
- Non utilizzare l'unità con temperature eccessivamente elevate o basse. La gamma raccomandata va dai 5°C ai 35°C.
- Dopo la riproduzione, togliere il CD.
- Se la lettura del CD fosse scorretta durante la riproduzione, abbassare il volume.
- Problemi di allineamento possono verificarsi a causa di forti urti oppure se l'unità viene utilizzata in luoghi soggetti a forti vibrazioni (per esempio viaggiando su un fondo stradale sconnesso).

Reproducción por acceso directo (utilizando la unidad de control remoto)

- Si presiona cualquiera de los botones de número de pista la reproducción se iniciará desde el principio de la pista escogida sin que tenga que presionar el botón ▶/II. (Esta función no puede ser usada durante la reproducción programada).

Riproduzione ad accesso diretto (col telecomando)

- La pressione di uno qualsiasi dei tasti del numero del brano avvia la riproduzione dall'inizio del brano designato senza dover premere il tasto ▶/II. (Questa funzione non può essere utilizzata durante la riproduzione programmata).



- Designate the required track using the track number buttons.
- To designate track numbers 1 to 10, press the track number button corresponding to the track number.
- To designate track number 11 or higher, press the +10 button the required number of times, then a track number button. (Example: To designate the 20th track, press the +10 button once, then press track number button 10.)

- Designare il brano desiderato utilizzando i tasti dei numeri di brano.

- Per designare i numeri di brano da 1 a 10, premere il tasto numerico corrispondente al numero del brano.
- Per designare il numero 11 o un numero maggiore, premere il tasto +10 per il numero di volte necessario e quindi un tasto numerico. (Esempio: Per indicare il 20° brano, premere una volta il tasto +10 e quindi il tasto di numero di brano 10).

- Botón +10: Cada vez que presiona este botón el número se incrementa en 10. Primero presione este botón para ingresar las decenas, luego presione el botón de número de pista para ingresar las unidades.

- Tasto +10: Ogni volta che questo tasto viene premuto, il numero aumenta di 10. Premere questo tasto per impostare le decine e quindi premere un tasto numerico per impostare le unità.

Para saltar a otra pista durante la reproducción

Cuando presiona el número de pista deseada, la indicación muestra el número de la pista y se inicia la reproducción desde el principio de la pista designada.

- Per saltare ad un altro brano durante la riproduzione Quando il tasto del numero di brano desiderato viene premuto, il display indica il numero di brano designato e la riproduzione inizia da tale brano.

- +10 button: Each time this button is pressed, the number increases by 10. First press this button to set the 10's digit, then press the track number button to set the 1's digit.

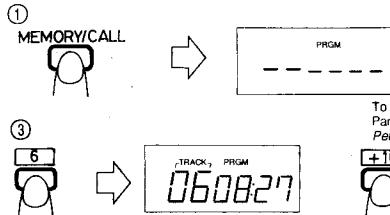
- To skip to another track during play: When the required track number button is pressed, the display shows the designated track number and play starts from the beginning of the designated track.

Programmed play (using the remote control unit)

- Up to 20 tracks can be programmed to be played in any required order.
- The total playing time of programmed tracks is displayed (up to 99 minutes, 59 seconds).
- (Example: When programming the 2nd track to be played first, and the 6th track next, then the 12th track, etc.)

Reproducción programada (utilizando la unidad de control remoto)

- Es posible programar un máximo de 20 pistas para reproducción en el orden deseado.
- La unidad indicará el tiempo total de reproducción de las pistas programadas (máximo de 99 minutos, 59 segundos).
- (Ejemplo: Cuando programa la 2da. pista para que sea reproducida primero y la 6ta. para ser reproducida a continuación, y luego la pista 12da., etc.)



- Press the MEMORY/CALL button to program the track number.
- Press to designate the required track number.
- Designate the remaining tracks by pressing the track number buttons.
- Press the >/II button when programming is completed. Programmed play starts.

To clear the programmed tracks...

Press the ■/CLEAR button before playing a CD. During programmed play, press this button twice. When the CD holder is opened, programmed tracks are cleared automatically.

To confirm the details of a program...

Press the MEMORY/CALL button; the tracks making up the program will be displayed in programmed order.

**Para borrar las pistas programadas...**

Presione el botón ■/CLEAR antes de reproducir el CD. Durante la reproducción programada presione este botón dos veces. Cuando se abre el compartimento del CD, las pistas programadas se borran automáticamente.

Para confirmar los detalles de un programa...

Presione el botón MEMORY/CALL; las pistas que componen el programa serán indicadas en el orden programado.

**Note:**

When a track number that is higher than 21 is programmed for a disc which contains more than 21 tracks, the track No. is displayed, however, ":-:" is shown in the total playback time.

Random play (using the remote control unit)

Press the RANDOM button, and all tracks on a CD play once in random order.

**INTRO scan operation (using the remote control unit)**

- Simply press the INTRO scan button to play the first 15 seconds of each track. The operation is released after the introductions of all tracks or all programmed tracks are played.
- If the INTRO scan button is pressed in the middle of a track, intro scan operation will start from the next track.
- To release the intro scan mode, press the INTRO scan button again. Normal or programmed play will resume.

**Repeat play (using the remote control unit)**

Press the REPEAT button before or during play. A single track or all the tracks can be repeated. Whether a single track or all tracks are to be repeated can be specified. Each time the REPEAT button is pressed, the mode will change from a single track (C), to all the tracks (C ALL), to the clear mode, in this order.

• Single track repeat (C)

The track being played will play repeatedly.

Reproducción aleatoria (utilizando la unidad de control remoto)

Para reproducir una vez todas las pistas de un CD aleatoriamente, presione el botón RANDOM.

- Para reproducir los primeros 15 segundos de una pista, simplemente presione el botón de búsqueda INTRO. La operación se desactiva después de reproducir las introducciones de todas las pistas o de todas las pistas programadas.
- Si presiona el botón de búsqueda INTRO en la mitad de una pista, la operación de búsqueda de introducción comenzará desde la próxima pista.
- Para desactivar el modo de búsqueda de introducción, presione otra vez el botón de búsqueda INTRO. Se reanudará la reproducción normal o la programada.

Operación de búsqueda INTRO (utilizando la unidad de control remoto)

Presione el botón REPEAT antes o durante la reproducción. Es posible repetir un o todas las pistas. Es posible especificar la reproducción de una sola o de todas las pistas. Cada vez que presiona el botón REPEAT el modo cambiará de la siguiente manera: una sola pista (C), a todas las pistas (C ALL), al modo de borrado, en este orden.

• Repetición de una sola pista (C)

La pista que está siendo reproducida será reproducida repetidamente.

Riproduzione programmata (col telecomando)

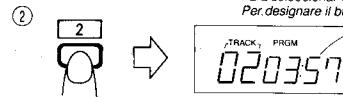
- Fino a 20 brani possono essere programmati per essere riprodotti in qualsiasi ordine desiderato. Il tempo totale di riproduzione dei brani programmati viene visualizzato (fino a 99 minuti e 59 secondi). (Esempio: quando si programma per riprodurre per primo il brano numero 2, per secondo il brano numero 6, per terzo il brano numero 12, ecc.)

To designate the 2nd track.

Para seleccionar la 2da pista.

Per designare il brano numero 2.

Playback time of the 2nd track
Tiempo de reproducción de la 2da pista
Tempo di riproduzione del 2° brano



The total playback time of programmed tracks is displayed. Se visualiza el tiempo de reproducción total de las pistas programadas. Il tempo di riproduzione totale dei brani programmati viene visualizzato.

- Para programar el número de pista presione el botón MEMORY/CALL.
- Presione para seleccionar el número deseado de pista.
- Designe las pistas restantes presionando los botones de número de pista.
- Cuando termine la programación presione el botón >/II. Se inicia la reproducción programada.

**Per cancellare i brani programmati...**

Premere il tasto ■/CLEAR prima di riprodurre un CD. Durante la riproduzione programmata, premere questo tasto due volte. Quando il piatto del CD viene aperto, i brani programmati vengono cancellati automaticamente.

Per controllare i dettagli di un programma...

Premere il tasto MEMORY/CALL; i brani programmati vengono visualizzati nell'ordine di programmazione.

Nota:

Cuando se programa un número de pista superior a 21 para un disco que contiene más de 21 pista, el No. de pista es indicado, sin embargo, ":-:" aparece en el tiempo total de reproducción.

Riproduzione casuale (col telecomando)

Premendo il tasto RANDOM, l'apparecchio inizia la riproduzione in ordine casuale, ed una sola volta, di tutti i brani del compact disc.

Operazione di ricerca INTRO (col telecomando)

- Premere semplicemente il tasto INTRO per riprodurre i primi 15 secondi di ciascun brano. Tale funzionamento si disattiva automaticamente al termine della riproduzione degli inizi di tutti i brani, o dei soli brani programmati.
- Si se premi il tasto INTRO nel corso della riproduzione di un brano, la funzione di esplorazione ha inizio dal brano successivo a quello in corso di riproduzione.
- Per disattivare la funzione di esplorazione degli inizi, premere di nuovo lo stesso tasto INTRO. La riproduzione normale, o programmata, riprende.

Riproduzione ripetuta (col telecomando)

Premere il tasto REPEAT prima o durante la riproduzione. È possibile eseguire la riproduzione ripetuta di un brano o di tutti i brani. È possibile specificare se si desidera la riproduzione ripetuta di un singolo brano oppure di tutti i brani. Ogni volta che il tasto REPEAT viene premuto, il modo cambia dal modo di ripetizione di un brano (C), al modo di ripetizione di tutti i brani (C ALL) al modo di cancellazione della riproduzione ripetuta, nell'ordine.

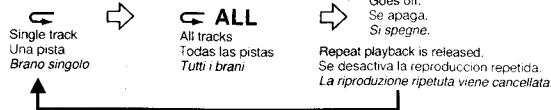
• Ripetizione di un singolo brano (C)

Il brano in corso di riproduzione viene riprodotto ripetutamente.

- **All track repeat (CD ALL)**
All tracks or the programmed tracks of a CD will play repeatedly.



- **Repetición de todas las pistas (CD ALL)**
La unidad reproducirá repetidamente todas las pistas de un CD o las programadas.



- **Ripetizione di tutti i brani (CD ALL)**
Tutti i brani oppure tutti i brani programmati di un CD vengono riprodotti ripetutamente.

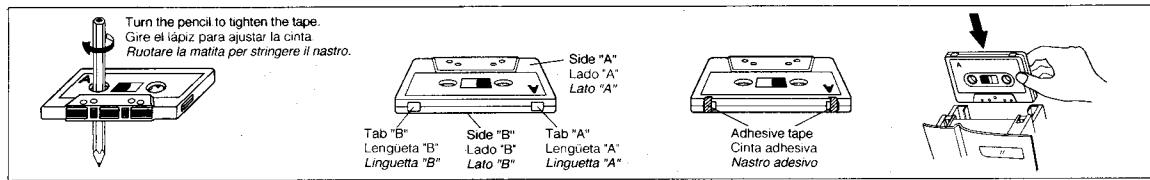
HANDLING CASSETTE TAPES

Cassette tapes

1. Loose tape may cause trouble. Using a pencil or like object, gently tighten the tape as shown.
2. To prevent recordings from being erased accidentally, remove the tab(s) with a screwdriver, etc. Reseal the slots with adhesive tape to erase and re-record after the tabs have been removed.
3. C-120 cassettes are not recommended because they are prone to malfunction.

Cassette loading

1. Press the **■/▲ STOP/EJECT** button to open the cassette holder.
2. Load a cassette as shown.
3. Close the cassette holder by pressing it gently. Listen for the click indicating that the holder is securely shut.



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MANIPULACION DE CASSETTES DE CINTA

Cassettes de cinta

1. La cinta floja puede causar problemas. Utilice un lápiz o un objeto similar y tensione gentilmente la cinta tal como se muestra.
2. Para evitar borrar grabaciones accidentalmente, extraiga la/s lengüeta/s con un destornillador, etc. Para borrar la cinta después de haber extraído las lengüetas, sella las ranuras con cinta adhesiva.
3. No se recomienda el uso de cassettes C-120 porque tienen tendencia a fallar.

Colocación de cassettes

1. Presione el botón **■/▲ STOP/EJECT** para abrir el portacassette.
2. Extraiga el cassette como se muestra.
3. Cierre el portacassette presionándolo suavemente. Cuando oiga un "clic" ello indica que el portacassette está correctamente cerrado.

MANEGGIO DEI NASTRI A CASSETTA

Nastri a cassetta

1. Nastri allentati possono causare problemi. Eliminare l'allentamento del nastro come illustrato per mezzo di una matita o di un oggetto simile.
2. Per evitare la cancellazione accidentale di registrazioni, rimuovere le linguelette con un cacciavite o un oggetto simile. Per cancellare o registrare nuovamente il nastro, coprire i fori con nastro adesivo.
3. Si raccomanda di non utilizzare cassette C-120 in quanto queste possono causare problemi.

Inserimento cassette

1. Premere il tasto **■/▲ STOP/EJECT** per aprire il vano portacassette.
2. Inserire una cassetta come indicato.
3. Chiudere il vano portacassette premendo gentilmente su di esso. Accertarsi di udire lo scatto che indica la sua chiusura.

CASSETTE PLAYBACK



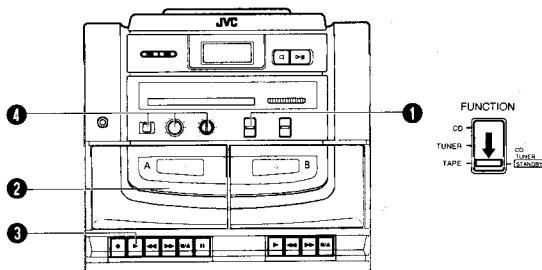
(The example shows Deck A)
Operate in the order shown

REPRODUCCION DE CASSETTES

(El ejemplo muestra la platina A)
Operar en el orden mostrado

RIPRODUZIONE DI CASSETTE

(L'esempio mostra il deck A)
Eseguire le operazioni nell'ordine indicato



- 1 Set to TAPE.
- 2 Load a cassette.
- 3 Press to start playback.
- 4 Adjust.

• Playback in Deck B

The previous procedures ① through ④ also apply to Deck B when a cassette is loaded in Deck B. When Decks A and B are simultaneously set to the play mode, only the playback sound of Deck B is heard.

Notes:

- When the power is turned off while the tape is still running, cassette operation buttons which are depressed do not return to their original positions.
- Press the **■/▲ STOP/EJECT** button to stop the tape running before turning off the power.
- Avoid operating the FF or REW button on the deck during playback of the other deck.

- 1 Colóquelo en TAPE.
- 2 Coloque un cassette.
- 3 Presionelo para iniciar la reproducción.
- 4 Ajuste.

• Reproducción en la platina B

Los procedimientos anteriores de ① a ④ también se aplican a la platina B cuando se hay un cassette colocado en la misma. Cuando la platina A y la B están activadas en el modo de reproducción simultánea, solo se escuchará el sonido de reproducción de la platina B.

Notas:

- Si se desconecta la alimentación mientras la cinta está girando, los botones de operación del cassette presionados no vuelven a su posición original. Presione el botón **■/▲ STOP/EJECT** para detener la cinta antes de desconectar la alimentación.
- Evite presionar el botón FF o REW de una platina mientras la otra está reproduciendo.

- 1 Portare questo comando su TAPE.
- 2 Inserire una cassetta.
- 3 Premere il tasto di riproduzione.
- 4 Regolare.

• Riproduzione nella Piatra B

Le procedure precedenti ① a ④ si applicano anche alla Piatra B quando vi è stata inserita una cassetta. Quando le piastre A e B vengono portate contemporaneamente nel modo di riproduzione, sarà possibile udire solo la riproduzione della Piatra B.

Note:

- Quando l'alimentazione viene disattivata durante lo scorrimento del nastro, i tasti di funzionamento premuti non ritornano nella loro posizione originale. Premere il tasto **■/▲ STOP/EJECT** per interrompere lo scorrimento del nastro prima di disattivare l'alimentazione.
- Evitare di utilizzare i tasti FF e REW di una piastra durante la riproduzione con l'altra piastra.

RELAY PLAYBACK



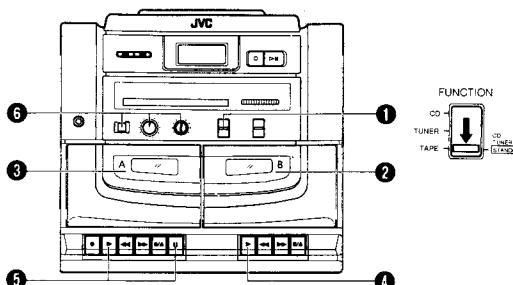
(From Deck B to Deck A)
Operate in the order shown

REPRODUCCION POR RELEVO

(De la platina B a la platina A)
Operar en el orden mostrado

RIPRODUZIONE CONTINUATA

(Dalla Piastra B alla Piastra A)
Eseguire le operazioni nell'ordine indicato



- 1 Set to TAPE.
- 2 Load a cassette.
- 3 Load a cassette.
- 4 Press the ► PLAY button on Deck B.
- 5 Set Deck A to the play-pause mode.
- 6 Adjust.

* When Deck B stops, Deck A's pause mode will be released and it will start playback. When Deck A stops automatically, relay playback will be released.

- 1 Coloque en TAPE.
- 2 Coloque un cassette.
- 3 Coloque un cassette.
- 4 Presione el botón ► PLAY de la platina B.
- 5 Active el modo de pausa de reproducción de la platina A.
- 6 Ajuste.

* Cuando la platina B se detiene, se desactiva el modo de pausa de la platina A y se inicia la reproducción. Cuando la platina A se detiene automáticamente, se desactiva la reproducción por relevo.

- 1 Portare questo comando su TAPE.
- 2 Inserire una cassetta.
- 3 Inserire una cassetta.
- 4 Premere il tasto ► PLAY della Piastra B.
- 5 Porre il deck A in modalità di pausa della riproduzione.
- 6 Regolare.

* Quando la riproduzione della Piastra B termina, la Piastra A abbandona il modo di pausa ed inizia la riproduzione. La riproduzione continuata termina quando la riproduzione della Piastra A termina.

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RADIO RECEPTION



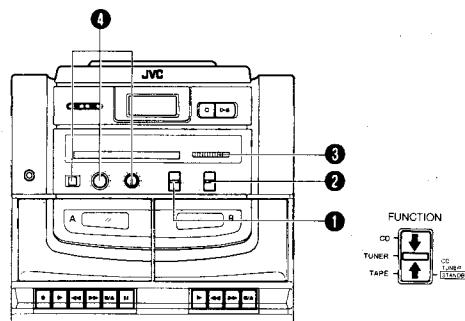
Operate in the order shown

RADIORRECEPCION

Operar en el orden mostrado

RICEZIONE CON LA RADIO

Eseguire le operazioni nell'ordine indicato



- 1 Set to TUNER.
- 2 Select the band.
- 3 Tune to the required station.
- 4 Adjust.

- 1 Colóquelo en TUNER.
- 2 Seleccione la banda.
- 3 Sintonice la estación deseada.
- 4 Ajuste.

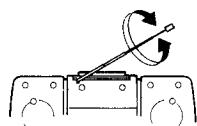
- 1 Portare questo comando su TUNER.
- 2 Selezionare la banda.
- 3 Sintonizzare la stazione desiderata.
- 4 Regolare.

Using the antennas

Utilización de antenas

Uso delle antenne

FM
FM
FM



MW/LW
OM/OL
MW/LW



Note:

The built-in ferrite core antenna can pick up interference from television receivers in the neighborhood and thereby disturb MW and LW reception.

Nota:

La antena de núcleo de ferrita incorporada puede captar interferencias de los televisores del vecindario y provocar, por consiguiente, en una recepción deficiente de emisiones de OM y OL.

Nota:

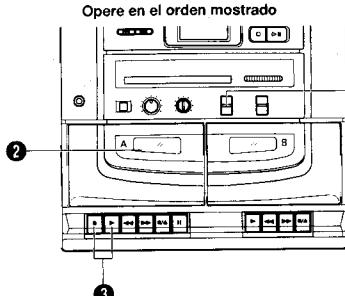
L'antenna con anima in ferrite può ricevere interferenze prodotte da televisori nel vicinato che possono disturbare la ricezione di trasmissioni MW e LW.

RECORDING



- During recording, the ALC (Automatic Level Control) circuit automatically optimizes the recording level, so manual recording level adjustment is unnecessary.
- Check that the safety tab on the cassette tape is not broken off.

Operate in the order shown



- Select the recording source.
 - When recording from the radio... TUNER
 - When recording from the CD player... CD
- Load a cassette. (See the note below.)
- Press the REC and PLAY buttons simultaneously.

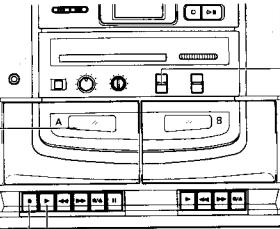
Note:
This unit has recording/playback characteristics suitable for normal tapes. Normal tapes have different characteristics from CrO₂ and metal tapes.

It may be unlawful to record or playback copyrighted material without the consent of the copyright owner.

GRABACION

- Durante la grabación, el circuito ALC (control automático de nivel), optimiza automáticamente el nivel de grabación, haciendo innecesario el ajuste manual del nivel de grabación.
- Verifique que la lengüeta de seguridad del cassette de cinta no esté rota.

Operar en el orden mostrado



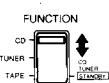
- Seleccione la fuente de grabación.
 - Cuando graba desde la radio... TUNER
 - Cuando graba desde un reproductor de CD... CD
- Coloque un cassette. (Ver la nota abajo.)
- Presione simultáneamente los botones REC y PLAY.

Nota:
Esta unidad tiene características de grabación/reproducción adecuadas para cintas normales. Las cintas normales tienen diferentes características que las cintas de CrO₂ y de metal.

Puede ser ilegal el grabar o reproducir material con derechos de autor sin el consentimiento del dueño de los mismos.

- Durante la registrazione, il circuito ALC (controllo automatico del livello) ottimizza automaticamente il livello di registrazione rendendo così superflua la regolazione manuale del livello di registrazione stesso.
- Controllare che la linguita di protezione della registrazione della cassetta non sia stata rimossa.

Eseguire le operazioni nell'ordine indicato



- Selezionare la fonte di registrazione.
 - Quando si registra dalla radio... TUNER
 - Quando si registra dal lettore CD... CD
- Inserire una cassetta. (Vedere la nota sotto.)
- Premere i tasti REC e PLAY contemporaneamente.

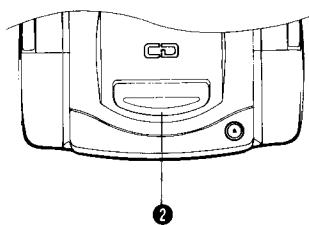
Nota:
Questa unità possiede caratteristiche di registrazione/riproduzione adatte a nastri normali. I nastri normali possiedono caratteristiche diverse dai nastri CrO₂ e Metal.

Notare che la registrazione o la riproduzione di materiali protetti da diritti d'autore senza il permesso del proprietario di tali diritti potrebbe essere contro la legge.

Synchronized recording with the CD player

- In this system, the CD player starts play when the cassette deck enters the recording mode.

Operate in the order shown



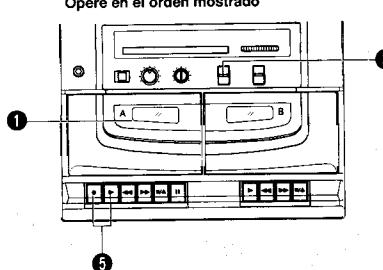
- Load a cassette.
- Load a CD and close the CD holder.
- Set to the CD mode.
- When programmed play is required, program the required tracks using the remote control. (See page 22.)
- Select tracks with a total playing time which does not exceed the tape length.
- Press the REC button and the PLAY button; synchronized recording will start.
- Non-recorded sections of approx. 4 seconds are automatically left between tunes.
- When the tape reaches the end first, the CD player stops automatically; when the CD player stops first, the tape continues running. In this case, press the STOP/EJECT button to stop the tape.

When non-recorded section between tunes is not required...
Perform the following after finishing the previous operation (1 to 8).
① Press the > II button of the CD player twice. The CD player enters the pause mode.
② Press the REC and PLAY buttons.
Now, the CD player starts play simultaneously.

Grabación sincronizada con el reproductor de CD

- En este sistema el reproductor de CD inicia la reproducción cuando la platina de cassette ingresa en el modo de grabación.

Operar en el orden mostrado



- Coloque un cassette.
- Coloque un CD y cierre el portadisco.
- Active el modo de CD.
- Cuando desee efectuar una grabación programada, programe el número de pistas deseadas utilizando el controlador remoto. (Ver página 22.)
- Seleccione las pistas con un tiempo total de reproducción que no exceda la longitud de la cinta.
- Presione el botón REC y el botón PLAY; se iniciará la grabación sincronizada.

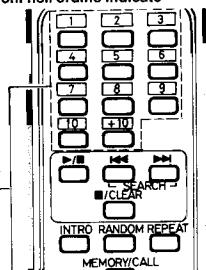
- En la cinta quedan automáticamente sin grabar secciones de 4 segundos aprox.
- Cuando la cinta llega al fin, el reproductor de CD para automáticamente; cuando el reproductor de CD para primero, la cinta continúa girando. En este caso, presione el botón STOP/EJECT para detener la cinta.

Cuando no es necesario dejar espacios sin grabar entre canciones...
Efectúe lo siguiente después de terminar la operación anterior (1 a 8).
① Presione dos veces el botón > II del reproductor de CD. El reproductor ingresa en el modo de pausa.
② Presione los botones REC y PLAY.
Ahora el reproductor de CD inicia la reproducción simultáneamente.

Registrazione sincronizzata col lettore CD

- In questo modo di funzionamento, il lettore CD inizia a riprodurre quando il registratore entra nel modo di registrazione.

Eseguire le operazioni nell'ordine indicato



- Inserire una cassetta.
- Inserire un CD e chiudere il piatto del CD.
- Impostare il modo del CD.
- Se si desidera eseguire la riproduzione programmata, programmare i brani desiderati utilizzando il telecomando. (Vedi pag. 22).
• Scegliere i brani con un tempo di riproduzione totale che non supera la lunghezza del nastro.
- Premere il tasto REC assieme al tasto PLAY; la registrazione sincronizzata inizia.

- Degli spazi non registrati da circa 4 secondi vengono creati automaticamente tra i brani.
- Se il nastro termina per primo, il lettore CD entra automaticamente nel modo di arresto; quando il lettore CD si ferma per primo, il nastro continua a scorrere. In questo caso, premere il tasto STOP/EJECT per interrompere lo scorrimento del nastro.

Nel caso in cui non siano necessari dei segmenti non registrati fra un brano e l'altro ...
Procedere come segue dopo aver completato l'operazione precedente (punti da 1 a 4).
① Premere due volte il tasto > II del lettore CD. Il lettore entra in modalità di pausa.
② Premere i tasti REC e PLAY.
Contemporaneamente il lettore CD inizia la riproduzione.

**TAPE DUBBING
(SYNCHRO START DUBBING)**

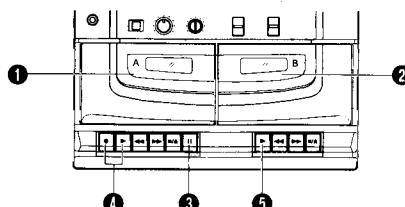

Normal-speed dubbing from Deck B to Deck A can be performed.

Operate in the order shown

**COPIA DE CINTA
(COPIA CON INICIO SINCRONIZADO)**

Es posible copiar de la platina B a la platina A a velocidad normal.

Operate en el orden mostrado



- 1 Load a cassette for recording. (Refer to the note on page 28.)
- 2 Load a recorded cassette.
- 3 Press the **PAUSE** button.
- 4 Press the **REC** button with the **PLAY** button. (Record-pause mode.)
- 5 Press the **PLAY** button. (Synchronized dubbing will start.)

Note:

- With Deck A in the record-pause mode, the **PAUSE** button is released when Deck B enters the stop mode.

PAUSE button

Press the **PAUSE** button, then press the **REC** and **PLAY** buttons to enter record-pause (standby) mode. Press the **PAUSE** button to begin recording at the exact moment you want to start recording.

- Do not leave the unit in pause mode for more than a few minutes. Instead, push the **STOP/EJECT** button and set the **FUNCTION** switch to TAPE/CD-TUNER STANDBY.

- 1 Coloque un cassette para grabación. (Refiérase a la nota de la página 28.)
- 2 Coloque un cassette grabado.
- 3 Presione el botón **PAUSE**.
- 4 Presione el botón **REC** conjuntamente con el botón **PLAY**. (Modo de pausa de grabación)
- 5 Presione el botón **PLAY**. (Se iniciará la copia sincronizada).

Nota:

- Cuando la platina A está en el modo de pausa de grabación y la platina B entra en el modo de parada, el botón **PAUSE** se desactiva.

Botón PAUSE

Para activar el modo de pausa de grabación (espera), presione el botón **PAUSE**, luego el botón **REC** y el botón **PLAY**. Para iniciar la grabación en el momento exacto que deseé iniciarla, presione otra vez el botón **PAUSE**.

- No deje la unidad en el modo de pausa durante más de unos pocos minutos. Presione el botón **STOP/EJECT** y coloque el conmutador **FUNCTION** en **TAPE/CD-TUNER STANDBY**.

DUPPLICAZIONE DEL NASTRO (DUPLICAZIONE CON AVVIAMENTO SINCRONIZZATO)

Si può ora eseguire la duplicazione a velocità normale dalla piastra B alla piastra A.

Eseguire le operazioni nell'ordine indicato

- 1 Inserire la cassetta sulla quale si vuole registrare. (Vedere in proposito la nota a pag. 28.)
- 2 Inserire la cassetta che si vuole riprodurre.
- 3 Premere il tasto **PAUSE**.
- 4 Premere il tasto **REC** assieme al tasto **PLAY**. (Modo di pausa della registrazione).
- 5 Premere il tasto **PLAY**. (La duplicazione sincronizzata inizia).

Nota:

- Con la piastra A nel modo di pausa della registrazione, il tasto **PAUSE** viene rilasciato quando la piastra B entra nel modo di arresto.

Tasto PAUSE

Premere il tasto **PAUSE**, e premere poi i tasti **REC** e **PLAY** per passare alla modalità di pausa della registrazione (attesa). Premere poi di nuovo il tasto **PAUSE** per avviare la registrazione nell'esatto momento in cui la si vuole iniziare.

- Non lasciare l'unità nel modo di pausa per più di qualche minuto. Quando necessario, premere il tasto **STOP/EJECT** e portare il comando **FUNCTION** sulla posizione **TAPE/CD-TUNER STANDBY**.

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Full auto-stop mechanism

When the tape reaches either end during recording/playback, fast forward or rewinding mode, the tape stops automatically.

BEAT CUT switch

When recording an MW or LW broadcast, beats may be produced which are not heard when listening to the broadcast. In such case, set this so that the beats are eliminated. Normally set this switch to "NORM 1".

Erasing

A recorded tape can be erased by recording new material over the previous material.

To erase a tape without making a new recording...

Follow the procedure in the "RECORDING" section, but in step ①, set the **FUNCTION** switch to **TAPE**, then perform recording to erase the tape.

Mecanismo de parada automática completa

Cuando la cinta llega a cualquiera de sus extremos durante la grabación/reproducción, avance rápido o rebobinado, se detiene automáticamente.

Comutador BEAT CUT

Cuando se graba una radiodifusión de OM o OL, se pueden producir compases que no son audibles cuando se escucha la radiodifusión. En tal caso colóquelo de tal manera que los compases sean eliminados. Normalmente coloque este comutador en "NORM 1".

Borrado

La cinta grabada puede ser borrada grabando otro material sobre el material anterior.

Para borrar una cinta sin efectuar una nueva grabación...
Siga el procedimiento de la sección "GRABACIÓN", pero en el paso ①, coloque el comutador **FUNCTION** en **TAPE**, luego efectúe la grabación para borrar la cinta.

Mecanismo di arresto completamente automatico

Quando il nastro raggiunge la fine di una facciata durante la registrazione/riproduzione o in modo di avanzamento o riavvolgimento, il nastro si ferma automaticamente.

Interruttore BEAT CUT

Quando si registra una trasmissione MW o LW, possono essere prodotti dei battimenti non udibili durante l'ascolto della trasmissione. In questo caso regolare questo interruttore in modo da eliminare i battimenti. Normalmente regolare questo interruttore su "NORM 1".

Cancellazione

Un nastro registrato può essere cancellato eseguendo una nuova registrazione sopra a quella precedente.

Per cancellare un nastro senza eseguire una nuova registrazione...

Eseguire la procedura descritta al paragrafo "REGISTRAZIONE", ma, al punto ①, disporre l'interruttore **FUNCTION** sulla posizione **TAPE**, ed eseguire poi la registrazione per cancellare il nastro.

MAINTENANCE

MANTENIMIENTO

La limpieza es importante!

Cuando la cinta está girando, el polvo magnético y el polvo se acumulan naturalmente en las cabezas, cabrestante y rodillo de presión. Cuando estén muy sucios...

- La calidad de sonido se deteriora.
- El nivel de salida de sonido se reduce.
- Las cintas grabadas no se borran completamente.
- La grabación no se realiza satisfactoriamente.

Por lo tanto, usted debe limpiar las cabezas, etc. después de cada 10 horas de uso para obtener condiciones de grabación óptimas.

Limpieza de las cabezas, cabrestante y rodillo de presión

Abrir el portacasette.

Limpie las cabezas, rodillo de presión y cabrestante.

Para una limpieza efectiva, utilice un conjunto de limpieza disponible en cualquier tienda de audio.

Después de la limpieza, asegúrese de que el líquido para la misma se haya secado completamente antes de colocar un cassette.

MANUTENZIONE

La pulizia è estremamente importante

Quando il nastro scorre, polvere magnetica e sporco si accumulano sulla testine, sui capstan e sui rullini. Quando essi sono troppo sporchi...

- La qualità del suono si deteriora.
- Il livello in uscita cala.
- Le registrazioni precedenti non vengono cancellate completamente.
- La registrazione non viene eseguita in modo soddisfacente.

Le testine, ecc., devono perciò essere pulite ogni 10 ore di uso per mantenere condizioni di funzionamento ottimali.

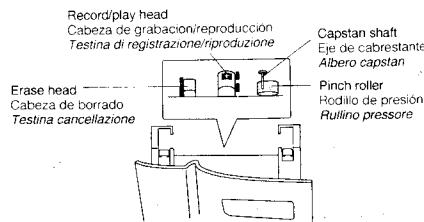
Pulizia de testine, capstan e rullini pressori

Apre il vano della cassetta.

Pulire testine, rullini pressori e capstan.

Per pulire in modo efficace, utilizzare un corredo di pulizia disponibile presso i negozi specializzati.

Dopo la pulizia accertarsi che il liquido pulente si sia asciugato completamente prima di inserire una cassetta.

**Cautions:**

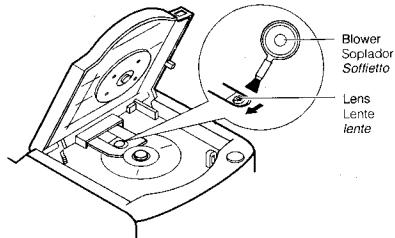
1. Keep magnets and metallic objects away from the head.
2. If the head becomes magnetized, noise will increase and the tone will deteriorate. Demagnetize the head every 20-30 hours of use with a head eraser (available from an audio store). (When demagnetizing the head, the FUNCTION switch should be set to TAPE/CD-TUNER STANDBY).
3. As the erase head of this unit is of magnetic type, do not demagnetize it.
4. Do not use anything other than alcohol for cleaning. Thinner and benzine will damage the rubber pinch roller.

Cleaning the lens

If the lens in the CD pickup is dirty, dropout, etc. could degrade sound.

Open the CD holder and clean the lens as shown.

- Use a blower (available from a camera store) to blow dust off the lens.
- If there are fingerprints, etc. on the lens, gently wipe clean with a cotton swab.

**Precauciones:**

1. Mantenga los imanes y objetos metálicos lejos de la cabeza.
2. Si la cabeza se magnetiza, el ruido aumentará y el sonido se deteriorará. Desmagnetice la cabeza cada 20-30 horas de uso con un desmagnetizador de cabezas (disponible en cualquier tienda de audio). (Cuando desmagnetiza la cabeza, el conmutador FUNCTION deberá estar colocado en TAPE/CD-TUNER STANDBY).
3. Como la cabeza de borrado de esta unidad es de tipo magnético, no la desmagnetice.
4. Para limpieza no utilice ningún otro producto que no sea alcohol. El diluyente y la bencina dañarán el rodillo de presión de goma.

Limpieza de la lente

Si la lente del lector de CD está sucia o manchada, etc., puede degradar el sonido.

Abra el compartimiento del CD y límpie la lente como se muestra.

- Utilice un soplador (disponible en una tienda de cámaras), para quitar el polvo de la lente.
- Si hay huellas digitales, etc. en la lente, límpie suavemente con un isopropíol de algodón.

**Precauciones:**

1. Tener magnéticos y objetos metálicos lejos de la testina. Si la testina se magnetiza, los disturbios aumentarán y el sonido se deteriorará. Desmagnetizar la testina ogni 20-30 ore di uso con un dispositivo aproposito (reperibile presso un negozio specializzato). (Quando si smagnetizza la testina, l'interruttore FUNCTION deve trovarsi su TAPE/CD-TUNER STANDBY).
2. Poiché la testina di cancellazione di questo apparecchio è del tipo magnetico, non smagnetizzarla.
3. Utilizzare solo alcool per la pulizia. Diluente o benzina danneggiano la gomma del rullino pressore.

Pulizia della lente

Se la lente del pickup del lettore CD è sporca, ecc., la qualità del suono potrebbe degradare.

Aprire il vano del CD e pulire la lente come indicato.

- Utilizzare un soffietto (reperibile in un negozio di materiale fotografico) per soffiare via la polvere dalla lente.
- Utilizzare solo alcool per la pulizia. Diluente o benzina danneggiano la gomma del rullino pressore.

TROUBLESHOOTING

What appears to be trouble is not always serious. First make sure...

- Power cannot be turned on.
 - Is the power cord unplugged?
- When the ► PLAY button is pressed, tape does not move.
 - Is the II PAUSE button pressed?
 - Playback sound is at a very low level.
 - Is the head dirty?
 - Are batteries run down?
 - The ○ REC button does not function.
 - Have the safety tabs of the cassette been broken off?
 - The CD player does not play.
 - Is the CD upside down?
 - Is the CD dirty?
 - Is the lens dirty?
 - Is there lens condensation? If so, set the FUNCTION switch to CD and wait for 1 or 2 hours before use.
 - No sound from the speakers.
 - Are headphones connected?
 - Since the tape speed is irregular, wow and flutter occur.
 - Is the pinch roller or capstan dirty?
 - Are batteries run down?
 - Remote control is impossible.
 - Are the batteries in the remote control exhausted?
 - Is the REMOTE SENSOR section exposed to bright light (direct sunlight, etc.)?

Note:

Before making an important recording, be sure to make a test recording first to check that the deck, etc. is working correctly.

DETECCION DE PROBLEMAS

Lo que parece ser un problema no siempre es grave. Primero asegúrese....

- No es posible conectar la alimentación.
 - ¿Está el cordón de alimentación desenchufado?
- Cuando se presiona el botón ► PLAY la cinta no se mueve.
 - ¿Está el botón II PAUSE presionado?
 - El sonido de reproducción tiene un nivel muy bajo.
 - ¿Está la cinta sucia?
 - ¿Están agotadas las pilas?
 - El botón ○ REC no funciona.
 - ¿Están las lenguetas de seguridad del cassette rotas?
 - El reproductor de CD no funciona.
 - ¿Está el CD invertido?
 - ¿Está el CD sucio?
 - ¿Está la lente sucia?
 - ¿Hay condensación en la lente?
 - En caso afirmativo, coloque el conmutador FUNCTION en CD y espere 1 o 2 horas antes de usarlo.
 - No sale sonido de los altavoces.
 - ¿Están los auriculares conectados?
 - Como la velocidad de la cinta es irregular se produce fluctuación y tremolación.
 - ¿Está el rodillo de presión o el cabrestante sucio?
 - ¿Están las pilas agotadas?
 - El controlador remoto no funciona.
 - ¿Están las pilas del controlador remoto agotadas?
 - La sección REMOTE SENSOR expuesta a una luz brillante (luces solares directas, etc.)?

Nota:

Antes de efectuar una grabación importante, asegúrese de hacer una grabación de prueba para verificar que la placa, etc. esté funcionando correctamente.

DIAGNOSTICA

Quanto sembra essere un problema spesso non è nulla di serio. Accertarsi prima di tutto...

- L'alimentazione non può essere attivata.
 - Il cavo di alimentazione è scollegato?
- Quando si preme il tasto ► PLAY il nastro non si muove.
 - Il tasto II PAUSE è premuto?
 - Il livello del suono riprodotto è molto basso.
 - La testina è sporca?
 - Le pile sono scariche?
 - Il tasto ○ REC non funziona.
 - Le lingue di protezione della registrazione della cassetta sono state rimosse?
 - Il lettore CD non riproduce.
 - Il CD è rovescio?
 - Il CD è sporco?
 - La lente è sporca?
 - È stata formata condensazione sulla lente?
 - In questo caso regolare l'interruttore FUNCTION su CD ed attendere 1 o 2 ore prima dell'uso.
 - I diffusori non producono alcun suono.
 - Le cuffie sono collegate?
 - Si verificano wow e flutter dovuti alla velocità irregolare del nastro.
 - Il rullino preminastro o il cabestano sono sporchi?
 - Le pile sono scariche?
 - Il funzionamento col telecomando è impossibile.
 - Le batterie del telecomando sono scariche?
 - La sezione REMOTE SENSOR è esposta ad una forte illuminazione (luce solare diretta, ecc.)?

Nota:

Prima di eseguire registrazioni importanti, accertarsi di eseguire una registrazione di prova per essere certi che il funzionamento del registratore, ecc., sia corretto.

SPECIFICATIONS

ESPECIFICACIONES

DATI TECNICI

CD player section

Type	Compact disc player
Signal detection system	Non-contact optical pickup
Number of channels	2 channels
Frequency response	20 Hz - 20,000 Hz
Signal-to-noise ratio	76 dB
Wow & flutter	Less than measurable limit

Radio section

Frequency range	FM 88-108 MHz (E version) FM 87.5-108 MHz (GI version) MW 540-1,600 kHz (E version) MW 526-1,607 kHz (GI version) LW 150-280 kHz (E version) LW 148-284 kHz (GI version)
Antennas	Telescopic antenna for FM Ferrite core antenna for MW and LW

Tape deck section

Track system	4-track 2-channel stereo
Motor	Electronic governor DC motor, for capstan
Heads	Deck A: Hard permalloy head for recording/playback, Magnetic head for erasure Deck B: Hard permalloy head for playback
Frequency response	80-12,500 Hz
Wow & flutter	0.15% (WFRMS)
Fast wind time	Approx. 120 sec. (C-60 cassette)

General

Power output	16 W (8 W + 8 W) at 3 Ω (Max.) 10 W (5 W + 5 W) at 3 Ω (10% THD)
Output terminals	PHONES x 1 (Output level: 0-15 mW/32 Ω, Matching impedance: 16 Ω - 1 kΩ) Speaker x 2 (Matching impedance: 3 Ω - 16 Ω)
Power requirements	AC 230 V, 50 Hz DC 12 V ("R20/D (13F)" batteries x 8) (E version only): Ext. DC 12 V (car battery via optional CA-R120E car adapter) 14 W (with POWER SW ON) 2 W (with POWER SW STANDBY)
Power consumption	10 W (5 W + 5 W) at 3 Ω (10% THD)

Dimensions

622 (W) x 256 (H) x 238 (D) mm, including knobs

Weight

7.0 kg (without batteries)

6.2 kg (without batteries)

Accessories provided

AC power cord x 1
Remote control unit (RM-RX620) x 1
"R6/AA (15F)" batteries x 2 (for the remote control)

Speaker Section (each unit)

10 cm x 1

Impedance

3 Ω

Dimensions

177 (W) x 237 (H) x 202 (D) mm

Weight

Approx. 1.2 kg

Design and specifications are subject to change without notice.

Sección del reproductor de CD

Tipo	Reproductor de discos compactos
Sistema de detección de señal	Lector óptico sin contacto
Número de canales	2 canales
Respuesta de frecuencia	20 Hz - 20,000 Hz
Relación señal-ruido	76 dB
Fluctuación y tremolación	Menor que el límite medible

Sección de la radio

Gama de frecuencias	FM 88-108 MHz (versión E) FM 87.5-108 MHz (versión GI) MW 540-1,600 kHz (versión GI) MW 526-1,607 kHz (versión GI) LW 150-280 kHz (versión E) LW 148-284 kHz (versión GI)
Antenas	Antena telescópica para FM Antena con núcleo de ferrita para OM y OL

Sección de la platina de cinta

Sistema de pistas	4 pistas 2 canales estereofónicos
Motor	Motor de CC controlado electrónicamente para el cabrestante
Cabezas	Platina A: Cabeza de permalloy duro para la grabación/reproducción, Cabeza magnética para borrado Platina B: Cabeza de permalloy duro para reproducción

Respuesta de frecuencia

80-12,500 Hz

0.15% (WFRMS)

Tiempo de bobinado rápido

120 seg. aprox. (cassette C-60)

Fluctuación y tremolación

Generalidades

Salida de potencia

16 W (8 W + 8 W) a 3 Ω (máx.)

10 W (5 W + 5 W) a 3 Ω (10% de distorsión armónica total)

Terminales de salida

PHONES x 1 (nivel de salida: 0-15 mW/32 Ω, Impedancia de adaptación: 16 Ω - 1 kΩ)

Altavoz x 2 (impedancia de adaptación de 3 Ω - 16 Ω)

230 V CA, 50 Hz

12 V CC (batería "R20/D (13F)" x 8)

Requisitos de alimentación

12 V de CC ext. (batería del automóvil) via adaptador para automóvil CA-R120E opcional)

(Versión E exclusivamente):

Consumo de energía

14 W (con POWER SW en ON)

2 W (con POWER SW en STANDBY)

Sección de altavoces (cada unidad)

Altavoz: 10 cm x 1

Impedancia: 3 Ω

Dimensiones: 177 (A) x 237 (Alt.) x 202 (P) mm

Peso: 1.2 kg Aprox.

Diseño y especificaciones sujetos a cambio sin aviso.

Sezione lettore CD

Tipo	Lettore di CD
Sistema rilevamento segnale	Pickup ottico senza contatto
Número canali	2 canali
Risposta frequenza	20 Hz - 20.000 Hz
Rapporto segnale/rumore	76 dB
Wow e flutter	Meno del limite misurabile

Sezione radio

Gamme frequenza	FM 88-108 MHz (versione E) FM 87.5-108 MHz (versione GI) MW 540-1,600 kHz (versione E) MW 526-1,607 kHz (versione GI) LW 150-280 kHz (versione E) LW 148-284 kHz (versione GI)
Antenne	Antenna telescopica FM Antenna in ferrite per MW e LW

Sezione registratore a cassette

Sistema registrazione	4 pistas, 2 canali stereo
Motore	Motore CC controllo elettronicamente per il capstan
Testine	Piastra A: Testina in permalloy duro per registrazione/riproduzione. Testina magnetica per cancellazione. Piastra B: Testina in permalloy duro per la riproduzione
Risposta in frequenza	80-12,500 Hz
Wow e flutter	0.15% (WFRMS)
Tempo avvolgimento rapido	Circa 120 secondi (cassetta C-60)

Generali

Potenza in uscita	16 W (8 W + 8 W) a 3 Ω (Mass.) 10 W (5 W + 5 W) a 3 Ω (10% di distorsione armónica complessiva)
Terminali di uscita	PHONES x 1 (Livello d'uscita: 0-15 mW/32 Ω, Impedanza: 16 Ω - 1 kΩ)
Alimentazione	SPEAKER x 2 (Impedanza 3 Ω - 16 Ω) 230 V CA, 50 Hz 12 V CC (batterie "R20/D (13F)" x 8)
(Solo versione E)	12 V CC est. (batteria d'automobile attraverso l'adattatore opzionale CA-R120E)
Consumo	14 W (con POWER SW su ON) 2 W (con POWER SW su STANDBY)

Dimensioni

622 (L) x 256 (A) x 238 (P) mm, manopole incluse

7,0 kg (con le batterie)

6,2 kg (senza le batterie)

Accessori in dotazione: Cavo alimentazione x 1

Unità telecomando (RM-RX620) x 1

Batterie "R6/AA (15F)" x 2 (per unità di telecomando)

Sezione diffusori (ciascuna unità)

Altoparlante: 10 cm x 1

Impedenza: 3 Ω

Dimensioni: 177 (L) x 237 (A) x 202 (P) mm

Peso: Circa 1,2 kg

Disegno e dati tecnici soggetti a cambiamenti senza preavviso.

4. Location of Main Parts

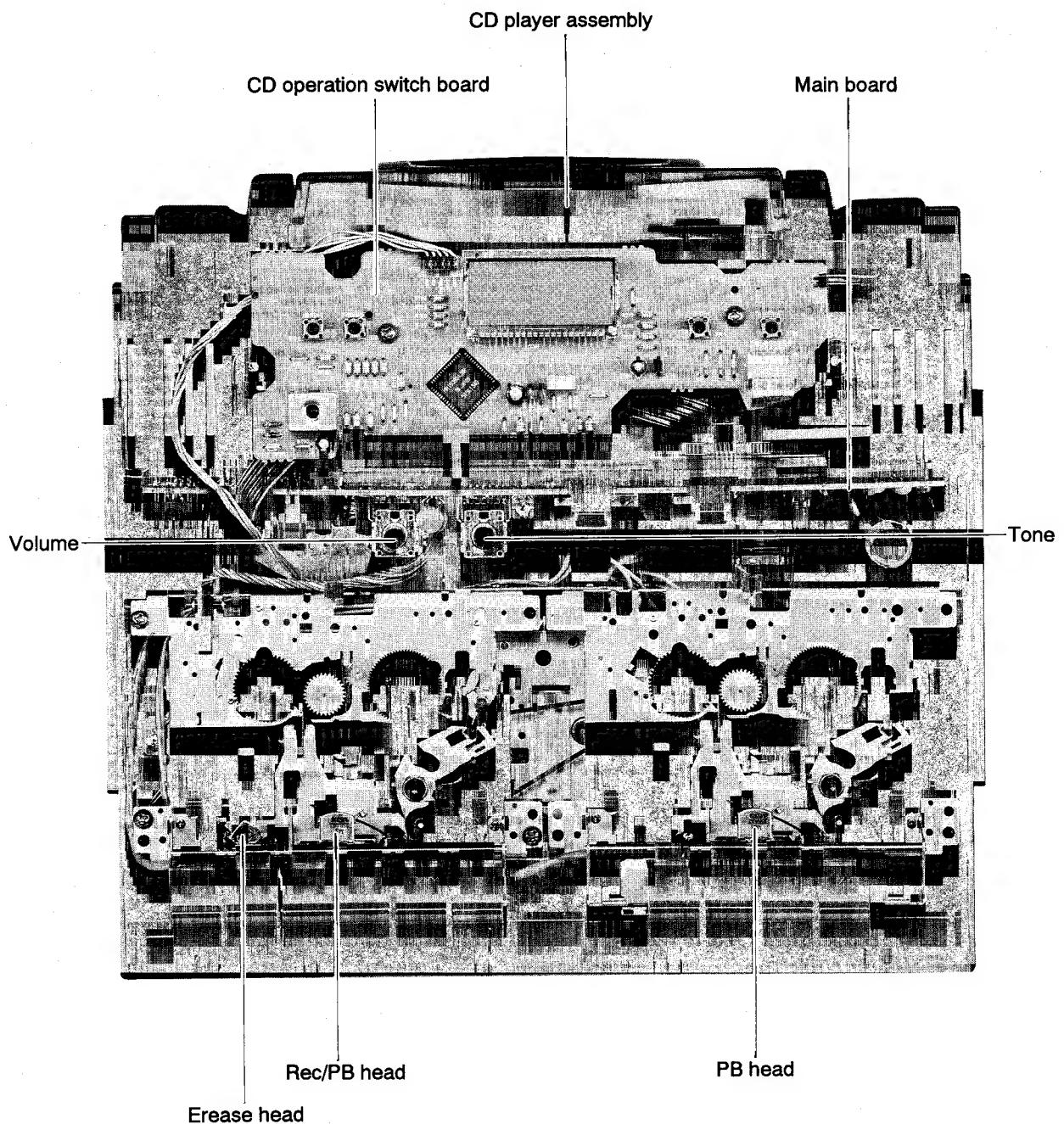


Fig. 4-1

5. Removal of Main Parts

■ Removing the Front Cabinet Assembly

(See Fig. 5-1 ~ 5-3)

1. From the back of the body, remove the six screws (1) retaining the front cabinet assembly.
2. From both sides of the body, remove the two screws (2) retaining the front cabinet assembly.
3. From the front face of the body, pull out the volume and tone knobs.
4. While pressing the "STOP/EJECT" buttons on both the mechanisms A and B, open the cassette door.
5. Take out the front cabinet assembly from the body.

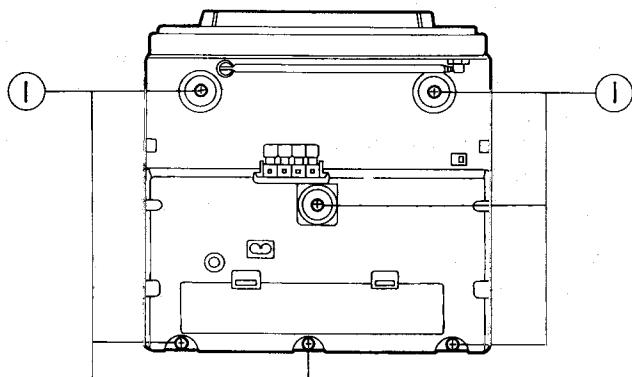


Fig. 5-1

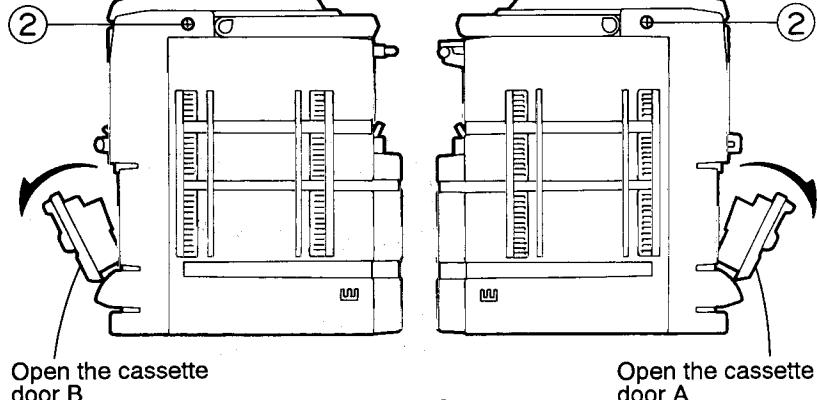


Fig. 5-2

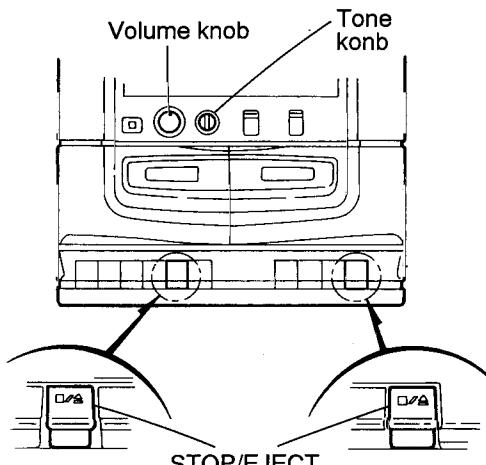


Fig. 5-3

■ Removing the Double Cassette Mechanism Assembly

(See Fig. 5-4)

1. Remove the four screws (3) retaining the double cassette mechanism.
2. From the connector CN301 on the main board, disconnect the connector wire outgoing from the double cassette mechanism.
3. From the connector CN305 on the main board, disconnect the 5-pin connector outgoing from W305 on the REC/PB select switch board provided on the back face of the double cassette mechanism assembly.
4. From the connector CN307 on the main board, disconnect the connector wire outgoing from the playback head.
5. From the connector CN307 on the main board, disconnect the 8-pin connector outgoing from the switches and so forth provided on the double cassette mechanism assembly.
6. From the connector CN302 on the main board, disconnect the 4-pin parallel wire outgoing from the capstan motor.

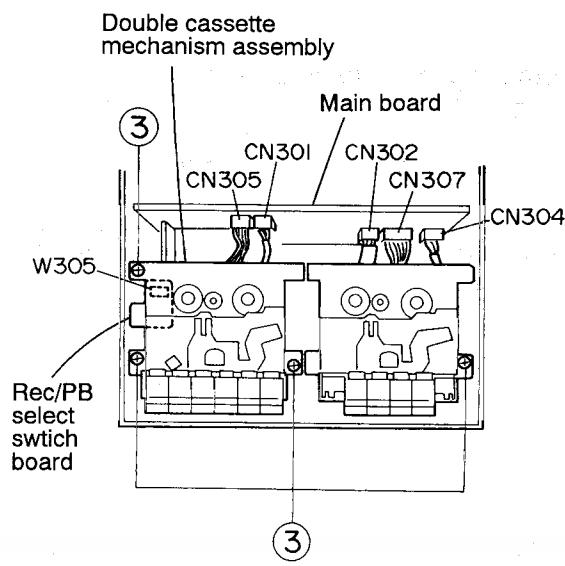


Fig. 5-4

■ Removing the CD Player Assembly

(See Fig. 5-5 and 5-6)

1. Raise the rod antenna on the back face of the body.
2. Remove the two screws (4) retaining the CD player assembly.
3. From the connector CN352 on the main board, disconnect the 5-pin connector outgoing from W701 on the CD operation switch board on the front face of the body.
4. From the connector CN351 on the main board, disconnect the 5-pin parallel wire outgoing from FW502 on the CD amplifier board.

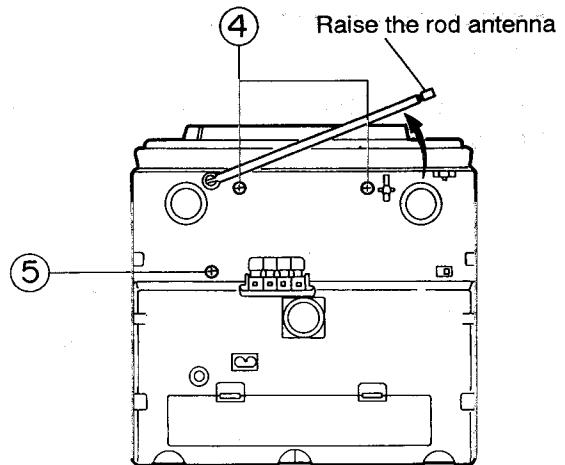


Fig. 5-5

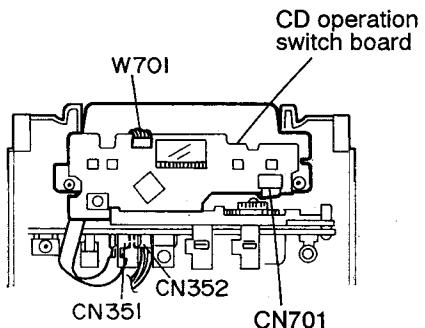


Fig. 5-6

■ Removing the Main Board

(See Fig. 5-7)

1. From the back face of the body, remove the one screw (5) retaining the main board.
2. From the connector CN997 on the power supply board, disconnect the 2-pin connector outgoing from W997 on the main board.

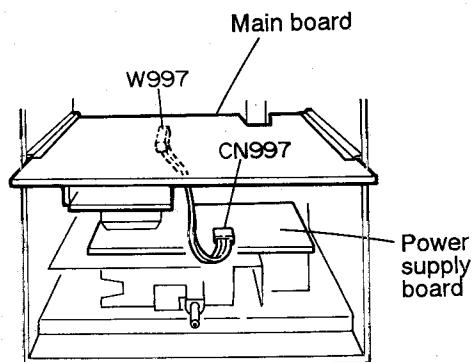


Fig. 5-7

■ Removing the Power Supply Board

(See Fig. 5-8)

1. From the front face of the body, remove the two screws (6) retaining the main transformer board.
2. Remove the two screws (7) retaining the AC socket.

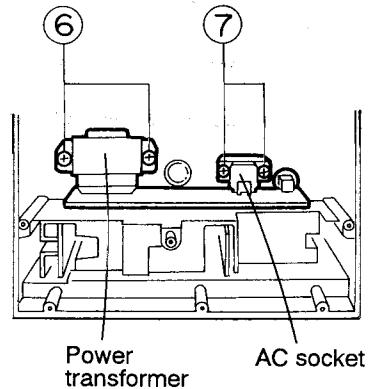


Fig. 5-8

■ Removing the CD Operation Switch Board

(See Fig. 5-9)

1. From the CD player assembly, remove the two screws (8) retaining the CD operation switch board.
2. From the connector CN701 on the CD operation switch board, disconnect the card wire outgoing from the connector CN601 on the CD amplifier board.
3. From the CD player assembly, remove the one screw (9) retaining the door switch board outgoing from the FW701 on the CD operation switch board.

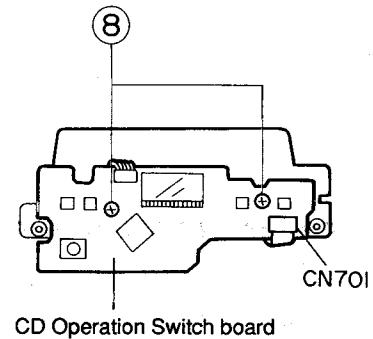


Fig. 5-9

■ Removing the CD Amplifier Board

(See Fig. 5-10)

1. Remove the two screws (10) retaining the CD amplifier board.
2. From the optical pickup, disconnect the card wire outgoing from the connector CN501 on the CD amplifier board.
3. From the connector on the CD mechanism board, disconnect the 6-pin connector outgoing from the connector CN502 on the CD amplifier board.

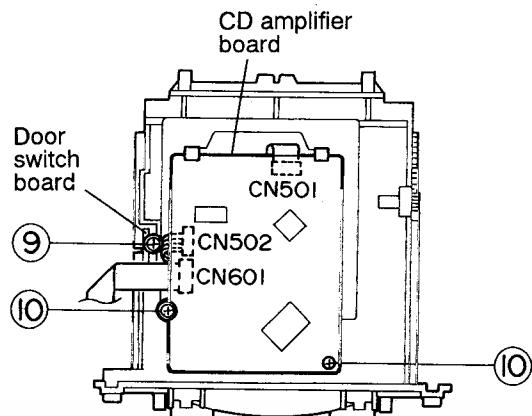


Fig. 5-10

■ Removing the CD Mechanism Assembly (See Fig. 5-11)

1. Remove the four screws (11) retaining the CD mechanism holder.
2. From the CD player assembly, take out the CD mechanism assembly.

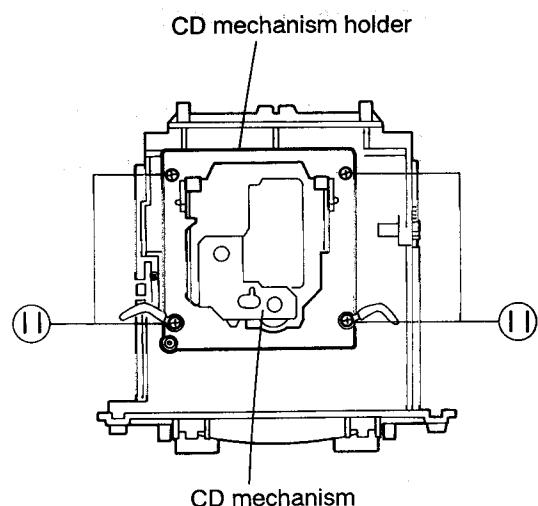


Fig. 5-11

■ Removing the Optical Pickup Unit (See Fig. 5-12)

1. Move the cam gear in the arrow direction (A). Then, the optical pickup unit will be moved in the arrow direction (B).
2. According to the above step, shift the optical pickup unit to the center position.
3. While pressing the stopper retaining the shaft in the arrow direction (C), pull out the shaft in the arrow direction (D).
4. After dismounting the shaft from the optical pickup unit, remove the optical pickup unit.

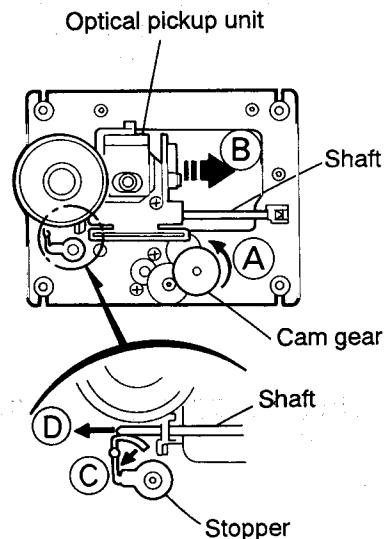
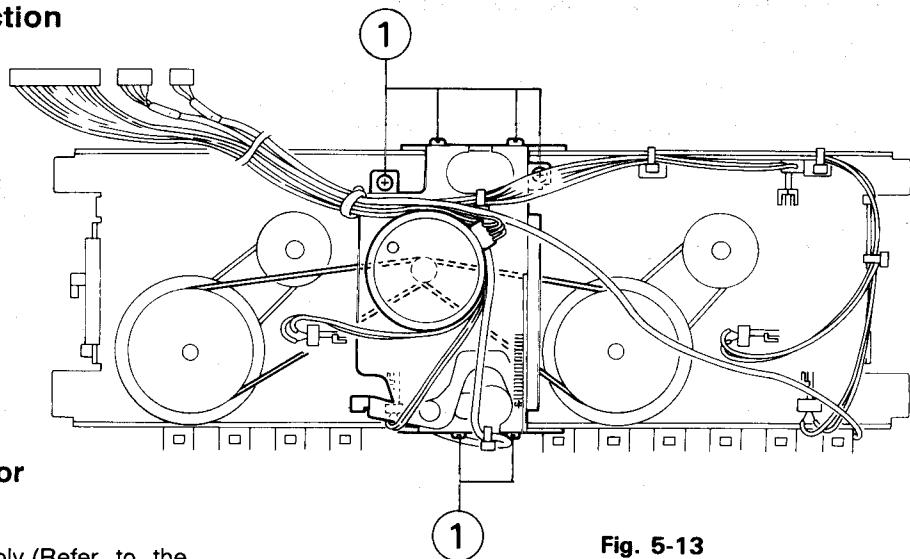


Fig. 5-12

■ Cassette Mechanism Section



■ Removing the Capstan motor

(See Fig. 5 – 13,14)

1. Remove the Front panel assembly.(Refer to the article "Front panel assembly" appearing on a previous page)
2. Remove the Cassette mechanism assembly.(Refer to the article "Cassette mechanism assembly" appearing on a previous page)
3. Remove the Main board(Refer to the article "Main board" appearing on a previous page.)
4. Remove the Cassette mechanism. (Refer to the article "Cassette mechanism" appearing on a previous page.)
5. Remove six screws ① retaining the motor bracket from the back of the cassette mechanism .
6. Take out the main belt from the flywheel assembly of mechanism A and B.
7. Remove six screws ② retaining the Capstan motor from the back of the cassette mechanism .

■ Removing the Eject slide lever

(See Fig. 5 – 15)

1. Place the cassette mechanism back side forward and disengage the stopper arm ⑤ of the Eject slide lever by pressing it inwards through the opening of the chassis with a small screwdriver as shown in Fig. 5 – 25.
2. Disengage the Eject slide lever in the direction of arrow ④.

■ Removing the Leaf switch

(See Fig. 5 – 16)

Press the leaf switch in the direction of the arrow ③ and then remove it in the direction of the arrow ④ referring to Fig. 5 – 16.

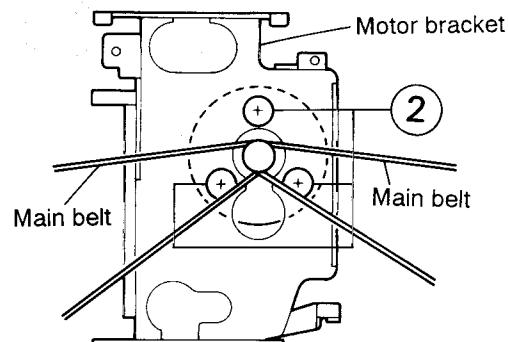


Fig. 5-14

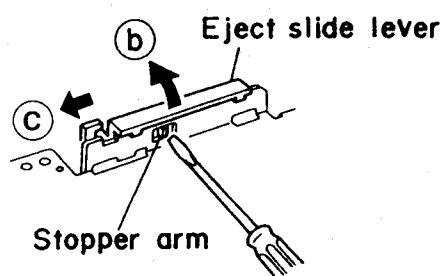


Fig. 5-15

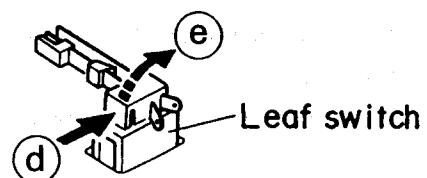


Fig. 5-16

■ Removing the Pinch roller assembly

(See Fig. 5 - 17)

1. Full out the stopper protruding from the base assembly in the direction of the arrow ① to remove it from the pinch roller assembly.
2. Then, pull out the pinch roller assembly in the direction of the arrow ②.

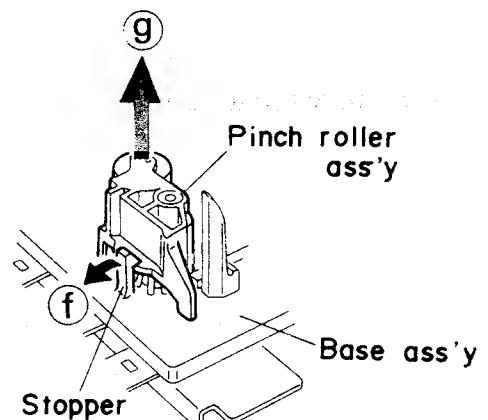


Fig. 5-17

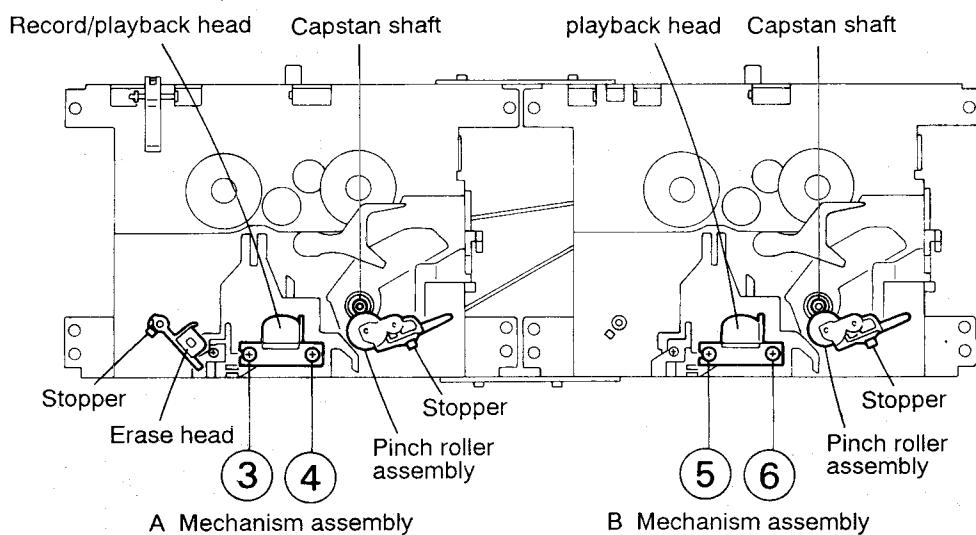


Fig. 5-18

■ Removing the Record / Playback head & Erase head

(See Fig. 5 - 18,19)

1. Remove two screws (③, ④) retaining the Record / Playback head of mechanism A.
2. Remove two screws (⑤, ⑥) retaining the Playback head of mechanism B.
3. Pull out the stopper of the Erase head in the direction of the arrow ⑩.
4. Pull out the Erase head in the direction of the arrow ⑪.

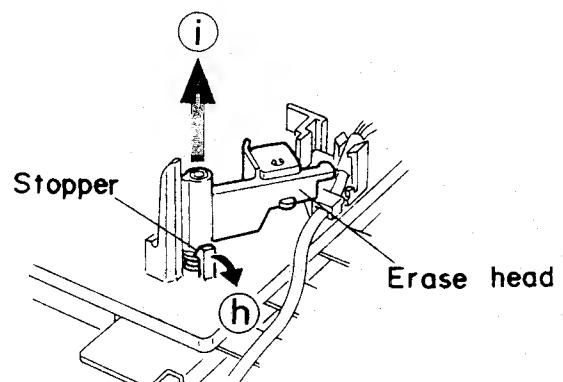


Fig. 5-19

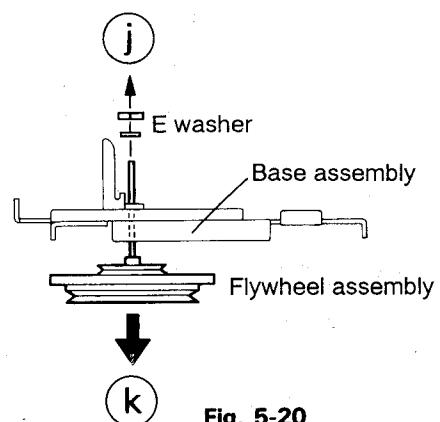


Fig. 5-20

■ Removing the Flywheel assembly

(See Fig. 5 - 20)

1. E. whasher retaining the flywheel assembly in the direction of arrow ①.
2. Pull the flywheel assembly out of the back side of the cassette mechanism in the direction of the arrow ②.

6. Main Adjustment

■ Test Instruments required for adjustment

1. Low frequency oscillator
(Frequency range: 50Hz to 20kHz)
- (Output : 0 dBs across 600 Ω terminating resistor)
2. Attenuator(Impedance : 600 Ω)
3. Test Tapes
- VTT712 For tape speed,wow and flutter measurement
- VTT724 For playback output level measurement
- VTT736 For playback frequency response check response check
- VTT703 For head azimuth adjustment
4. Blank tapes
- Normal : UR or AC224
5. Electronic voltmeter,
6. Distortion meter
7. Frequency counter
8. Wow and flutter meter
9. Torque gauge : CTG - K
(Cassette type) For mechanism adjustment

■ Measuring conditions (Amplifier section)

Supply voltage AC230 V (50/60Hz)

Reference output level :Speaker
0 dBs (0.775V) / 3 Ω
: Headphone
0 dBs (0.775V) / 32 Ω

Reference input level
:- 25dBs supplied to test point

Standard test frequency 1kHz

Output measuring point Speaker terminal
Dummy load 3 Ω
or headphone(32 Ω)

● Standard position of switches

Function switch TAPE

● Standard position of controls

Tone Maximum position

Main volume adjust 0 dBs output position

Beat cut switch Standard 1

● Test remarks

1. Negative side of the input and output terminals of the testing set, shall be isolated from each other. The negative side should not be commonly connected when a 2channel electronic voltmeter is connected.
2. A dummy load shall be connected to the output terminal and the lead wires of dummy load shall be as thick as possible.

■ Measuring condition (Tuner section)

Power supply voltage to tuner DC 7V

Reference output Speaker : 50mW(0.39 V / 3 Ω)
Headphone : 0.08V / 32 Ω

AM modulation 400Hz, 30%

FM modulation 400Hz deviation 22.5kHz

● Standard position of switches and controllers

Function RADIO

Mode STEREO

Tone Maximum position

● Remarks for alignment

1. Connect 30 pF capacitor and 33 k Ω resistor to the output terminal of the IF sweeper in series while 0.082 μ F capacitor and 100k Ω resistor to the input terminal in series.
2. Set the output level of the IF sweeper as low as adjustable.
3. IF alignment is not necessary for both AM and FM MPX alignment is not necessary either. All IFTs and MPX coil are non-adjusting type.

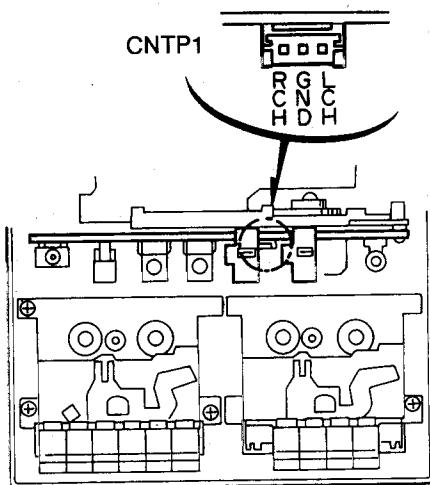


Fig. 6-1

● Test condition

① Test tape for REC/PB

Normal tape : AC-224

② Standard test frequency

1kHz : unless otherwise specified

③ Reference input level: CNTP1 (-25dBs)

④ Input for REC/PB, using to the check and measuring

Test point CNTP1 : -45dBs

⑤ Output for measuring, unless otherwise specified

At speaker terminal : J802 (Dummy load 3 Ω)

⑥ position of test : Vertical

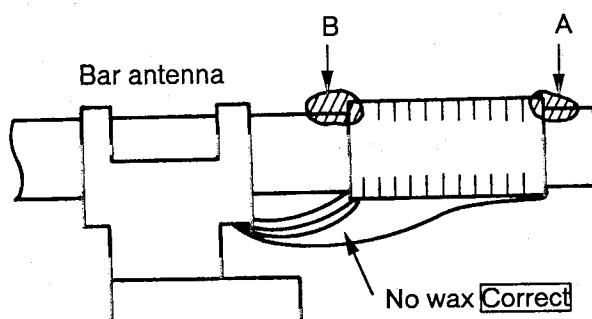


Fig. 6-2

● Arrangement of Adjusting position

Caution for putting wax on the bar antenna

MW RF

Following points must be care when putting wax on the bar antenna after MW RF alignment.

① In case fixing the bar antenna is certain.

② Waxing only "A" part is necessary. In case fixing the bar antenna is unstable. Wax "A" part first, and carry on other works then wax "B" part at last. To prevent tracking error, waxing B part should be done after Fig. 9-3 cooling down "A" part sufficiently.

③ Be careful not to leak wax to the bottom of coil lead when Fig. 9-4 waxing B part.

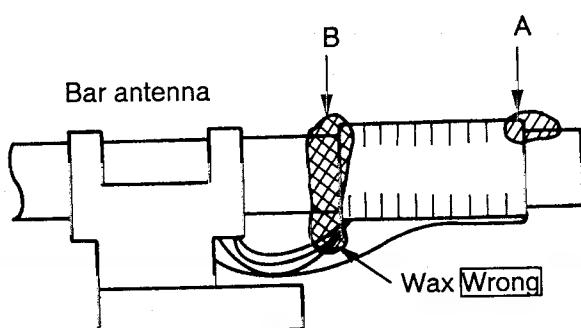
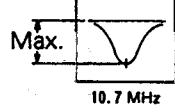
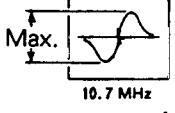


Fig. 6-3

■ Tuner Section (*AM,FM IF Adjust : Alignment is not necessary, in using the solid IF.)

Item	Conditions	Adjustment & Confirmation Methods	Stand. values	Adjust
Adjustment of FM IF	<ul style="list-style-type: none"> • Band select : FM • Receive freq. : Near the upper band edge where no signal comes in. • input position : TP5 (hot side) • output position : TP6 (hot side) • TP7 (earth side) 	<p>① Remove CF3 so that "S" curve may be changed to IF wave from as shown Fig.a. Adjust T1 further more to obtain maximum and balanced wave from.</p> <p>② Put back CF3 so that "S" curve on the scope may obtain maximum and balanced wave from as shown Fig.b</p> <p>On the FM circuit, IF filter and discriminator is solid units, so there is not necessary for tuning. In case IF tuning may be needed (Repair etc....), do that above mentioned alignment.</p>	<p>Symmetrical waveform : Maximum output</p> 	T1
Adjustment of AM IF	<ul style="list-style-type: none"> • Band select: AM • Receive freq. : Near the upper band edge where no signal comes in. • input position : TP3(hot side) • output position : TP6 (hot side) • TP7 (earth side) 	<p>Adjust above mentioned aligning position, so that maximum and symmetrical wave form (see Fig.a) can be obtained, in this case, the wave peak should appear on the center marker (455kHz) in the scope of sweeper.</p> <p>On the AM IF circuit, IF filter is solid units, so there is not necessary for IF tuning. In case of tuning may be needed(repair etc...), do the above mentioned alignment.</p>	<p>Symmetrical waveform : maximum</p> 	T2
Adjustment of FM RF	<ul style="list-style-type: none"> • Band select : FM • signal input : TP1 (hot side) • TP2 (earth side) <p>Through dummy antenna</p>	<p>① Adjust the L1 so as to tune in 87.5MHz signal at the maximum capacitance position.</p> <p>② Adjust the TC1, TC11 so as to tune in 109.0MHz signal at the minimum capacitance position.</p> <p>③ Repeat the above step ① and ②.</p> <p>④ Adjust the L2 for the maximum sensitivity while receiving 90.0MHz signal.</p> <p>⑤ Adjust the TC2 for the maximum sensitivity while receiving 106.0MHz signal.</p> <p>⑥ Repeat the above step ④ and ⑤.</p>	<p>Maximum output</p> <p>TC1,TC11</p> <p>L2</p> <p>TC2</p>	L1

Item	Conditions	Adjustment & Confirmation Methods	Stand. values	Adjust
Adjustment of FM RF GI version only	<ul style="list-style-type: none"> • Band selector : FM • signal input : TP1 (hot side) • TP2 (earth side)Through dummy antenna 	<p>① Adjust the L1 so as to tune in 87.35MHz signal at the maximum capacitance position.</p> <p>② Adjust the TC1, TC11 so as to tune in 108.3MHz signal at the minimum capacitance position.</p> <p>③ Repeat the above step ① & ②.</p> <p>④ Adjust the L2 for the maximum sensitivity while receiving 90.0MHz signal.</p> <p>⑤ Adjust the TC2 for the maximum sensitivity while receiving 106.0MHz signal.</p> <p>⑥ Repeat the above step ④ & ⑤.</p>	Maximum output	L1 TC1, TC11 L2 TC2
Adjustment of FM RF VX Version only	<ul style="list-style-type: none"> • Band selector : FM • signal input : TP1 (hot side) • TP2 (earth side)Through dummy antenna 	<p>① Adjust the L1 so as to tune in 64.0MHz signal at the maximum capacitance position.</p> <p>② Adjust the TC1, TC11 so as to tune in 109.0MHz signal at the minimum capacitance position.</p> <p>③ Repeat the above step ① & ②.</p> <p>④ Adjust the L2 for the maximum sensitivity while receiving 69.0MHz signal.</p> <p>⑤ Adjust the TC2 for the maximum sensitivity while receiving 102.0MHz signal.</p> <p>⑥ Repeat the above step ④ & ⑤.</p>	Maximum output	L1 TC1, TC11 L2 TC2
Adjustment of MW RF B/E/G/VX version only	<ul style="list-style-type: none"> • Band selector : MW • signal input : Loop antenna 	<p>① Adjust the L5 so as to tune in 520kHz signal at the maximum capacitance position.</p> <p>② Adjust the TC3 so as to tune in 1650kHz signal at the minimum capacitance position.</p> <p>③ Repeat the above step ① & ②.</p> <p>④ Adjust the L6 for the maximum sensitivity while receiving 600kHz signal.</p> <p>⑤ Adjust the TC4 for the maximum sensitivity while receiving 1400kHz signal.</p> <p>⑥ Repeat the above step ④ & ⑤.</p>	Maximum output	L5 TC3 L6 TC4

Item	Conditions	Adjustment & Confirmation Methods	Stand. values	Adjust
Adjustment of MW RF GI version only	<ul style="list-style-type: none"> • Band selector : MW • signal input : Loop antenna 	<p>① Adjust the L5 so as to tune in 516kHz signal at the maximum capacitance position.</p> <p>② Adjust the TC3 so as to tune in 1632kHz signal at the minimum capacitance position.</p> <p>③ Repeat the above step ① & ②.</p> <p>④ Adjust the L6 for the maximum sensitivity while receiving 600kHz signal.</p> <p>⑤ Adjust the TC4 for the maximum sensitivity while receiving 1400kHz signal.</p> <p>⑥ Repeat the above step ④ & ⑤.</p>	Maximum output	L5 TC3 L6 TC4
Adjustment of LW RF B/E/G/VX version	<ul style="list-style-type: none"> • Band selector : LW • signal input : Loop antenna 	<p>① Adjust the L3 so as to tune in 145kHz signal at the maximum capacitance position.</p> <p>② Adjust the TC9 so as to tune in 290kHz signal at the minimum capacitance position.</p> <p>③ Repeat the above step ① & ②.</p> <p>④ Adjust the L4 for the maximum sensitivity while receiving 145kHz signal.</p> <p>⑤ Adjust the TC10 for the maximum sensitivity while receiving 290kHz signal.</p> <p>⑥ Repeat the above step ④ & ⑤.</p>	Maximum output	L3 TC9 L4 TC10
Adjustment of LW RF GI Version only	<ul style="list-style-type: none"> • Band selector : LW • signal input : Loop antenna 	<p>① Adjust the L3 so as to tune in 138kHz signal at the maximum capacitance position.</p> <p>② Adjust the TC9 so as to tune in 293kHz signal at the minimum capacitance position.</p> <p>③ Repeat the above step ① & ②.</p> <p>④ Adjust the L4 for the maximum sensitivity while receiving 138kHz signal.</p> <p>⑤ Adjust the TC10 for the maximum sensitivity while receiving 293kHz signal.</p> <p>⑥ Repeat the above step ④ & ⑤.</p>	Maximum output	L3 TC9 L4 TC10

■ CD player Section

Item	Conditions	Adjustment & Confirmation Methods	Stand. values	Adjust
Tracking offset adjustment	<p>Test disc :CTS1000 Oscilloscope</p> <p>Note 1 Adjust VR501 so that the waveform becomes vertically symmetrical to the reference voltage value of servo.</p> <p>Note 2 The oscilloscope input should be DC - coupled.</p> <p>Note 3 VREF: Ground level on the oscilloscope.</p>	<p>① Connect TP503 (TE) and TP501 (VREF) respectively to the hot and ground sides of the oscilloscope.</p> <p>② Replay the test disc CTS1000.</p> <p>③ When TP504 and TP501 have been connected (Shorted) during replay, a tracking error signal will be emitted for about 3 sec. (Since the tracking error signal will be emitted at all times when the model with a test mode function is shifted to TEST mode, the adjustment can be performed more easily).</p> <p>④ Since the waveform of tracking error signal displayed by the oscilloscope goes up and down when VR501 has been adjusted, adjust VR501 so that the center of the waveform amplitude becomes a reference voltage value of servo(VREF).</p> <p>⑤ Repeat the steps ②~④ until the center of the waveform amplitude of tracking error signal becomes the reference voltage value of servo (This step is not necessary in the case of the model with test mode function).</p>	Adjust the center of waveform amplitude to the reference voltage value of servo (VREF).	VR501

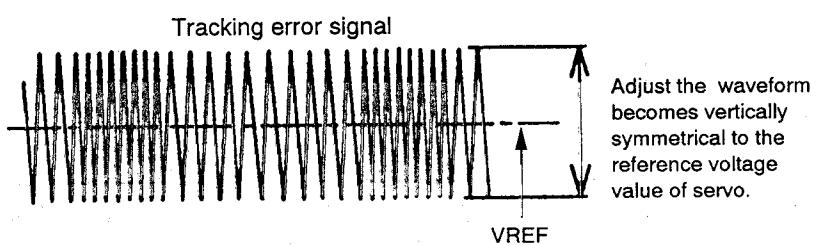


Fig. 6-4

■ Mechanism & Amplifier Sections

Item	Conditions	Adjustment & Confirmation Methods	Stand. values	Adjust
Adjustment of Head azimuth	Test tape :VTT703L (10kHz) Measuring point :Headphone (Dummy load 32 Ω)	① Play the test tape VTT703L(10kHz). ② Adjust the head azimuth screw so that the phase difference of the R channel becomes minimum at the maximum output point. After adjustment, lock more than half the circumference of the head azimuth screw. * Adjust the head azimuth screw only when the head is replaced.	Output :Maximum Phase difference :minimum	Head azimuth screw
Check of Tape speed and Wow & flutter	Test tape : VTT712(3kHz) Measuring point : Headphone (Dummy load 32 Ω)	① Play the test tape VTT712 (3kHz) until it has been winded. ② The frequency counter reading should be within 2940~3090Hz. Otherwise, adjust the semi-fixed volume inside the motor housing. ③ The wow & flutter should be less than 0.4% (UNWTD).	2940~3090Hz Less than 0.4%(UNWTD)	Semi-fixed resister inside the motor housing —
Check of Playback output	• Test tape : VTT724 • Measuring point : Speaker (Dummy load 3 Ω)	When the test tape VTT724 is played, the L and R channels output deviation should be 4dB or less.	Less than 4dB	—
Check of Playback Frequency response	• Test tape : VTT736 • Standard freq. : 1kHz Measuring point : Speaker (Dummy load 3 Ω)	When the test tape VTT736 is played, the playback frequency response should be 125Hz against 1kHz, 5dB ± 4 dB, 8kHz against 1kHz ,0dB ± 3dB.	125Hz/1kHz : 5dB ± 4dB 8kHz/1kHz : 0dB ± 3dB.	—
Check of Recording & Playback sensitivity	• Reference input : CNTP1 • Measuring point :Speaker (Dummy load 3 Ω)	Supply 1kHz (-25dB) signal to the test point CNTP1 and record it. Play it back while checking that the level is within 0dB ± 3dB .	within 0dB ± 3dB .	—

■ Arrangement of Adjusting Position :CD Amplifier P. C. Board

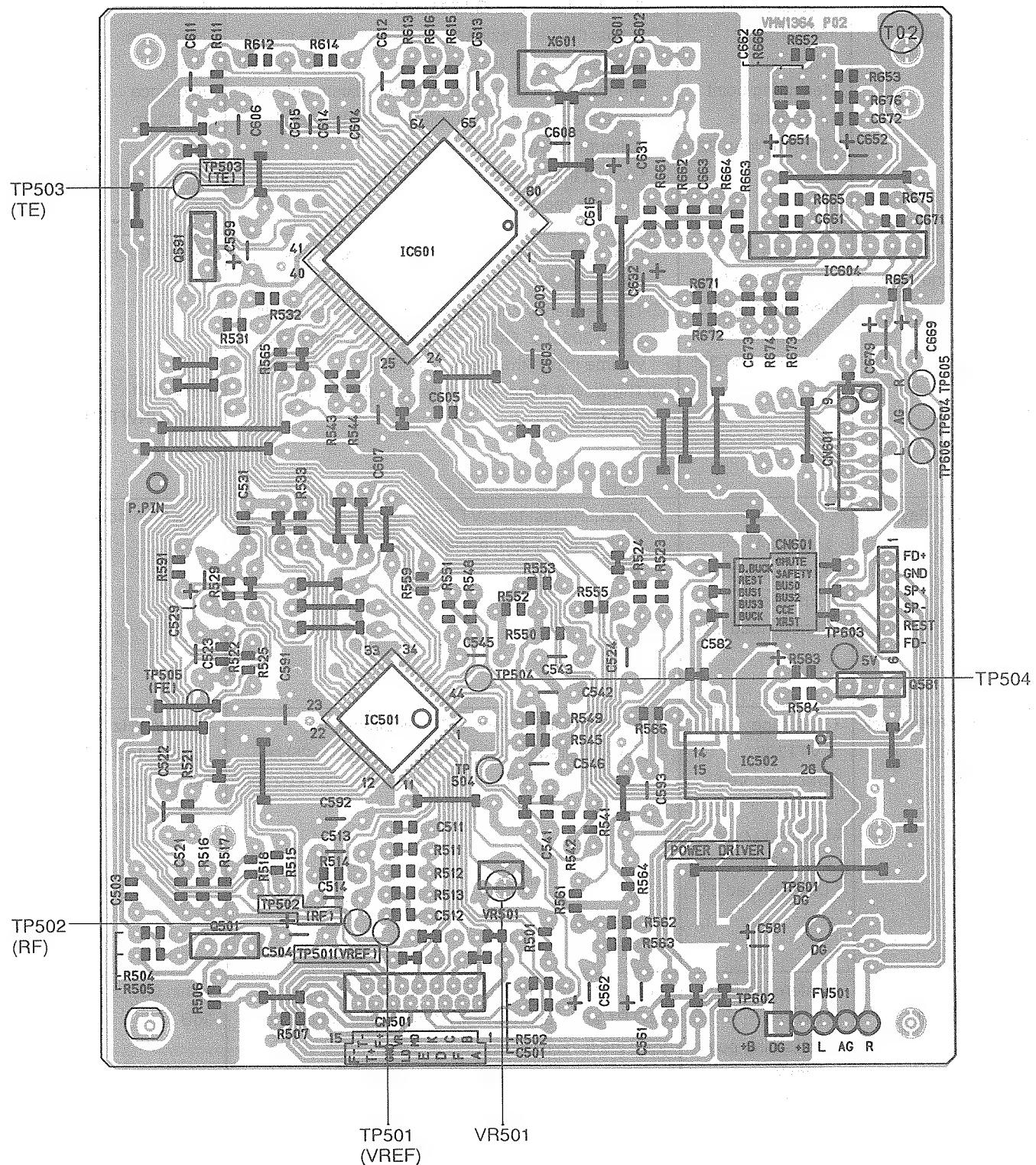


Fig. 6-5

■ Arrangement of Adjusting Position
:Tuner P. C. Board

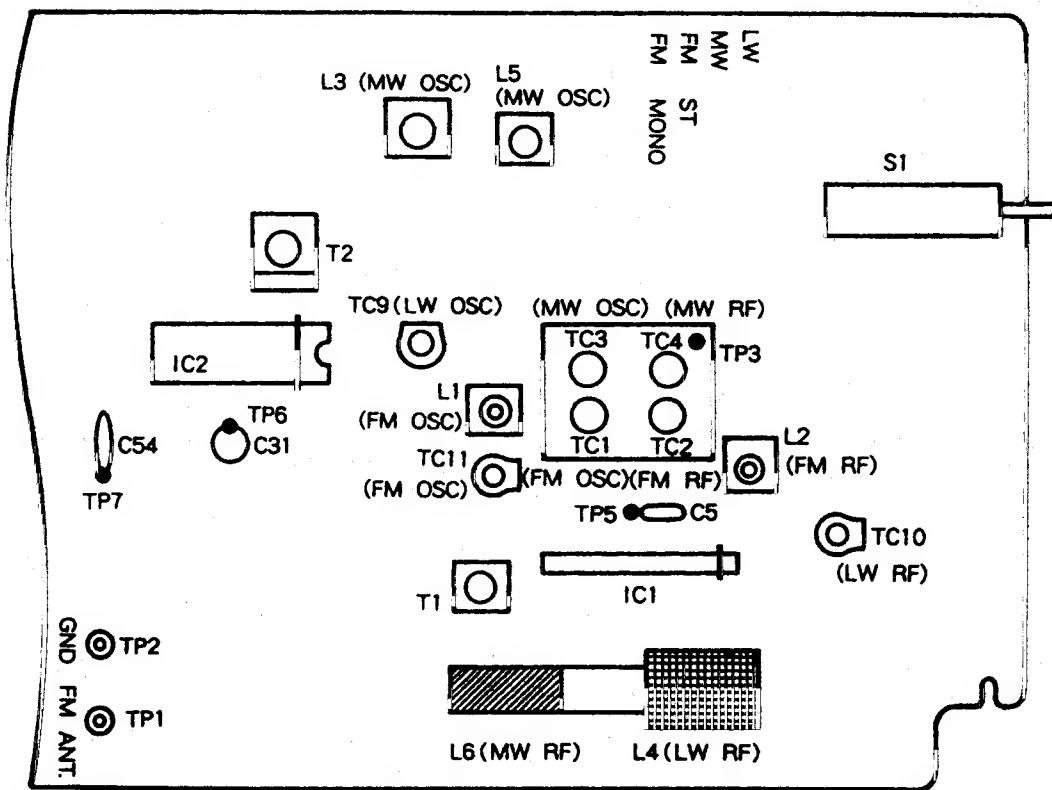


Fig. 6-6

7. Troubleshooting of CD Part

General descriptions of TOC (Table of Contents) readings

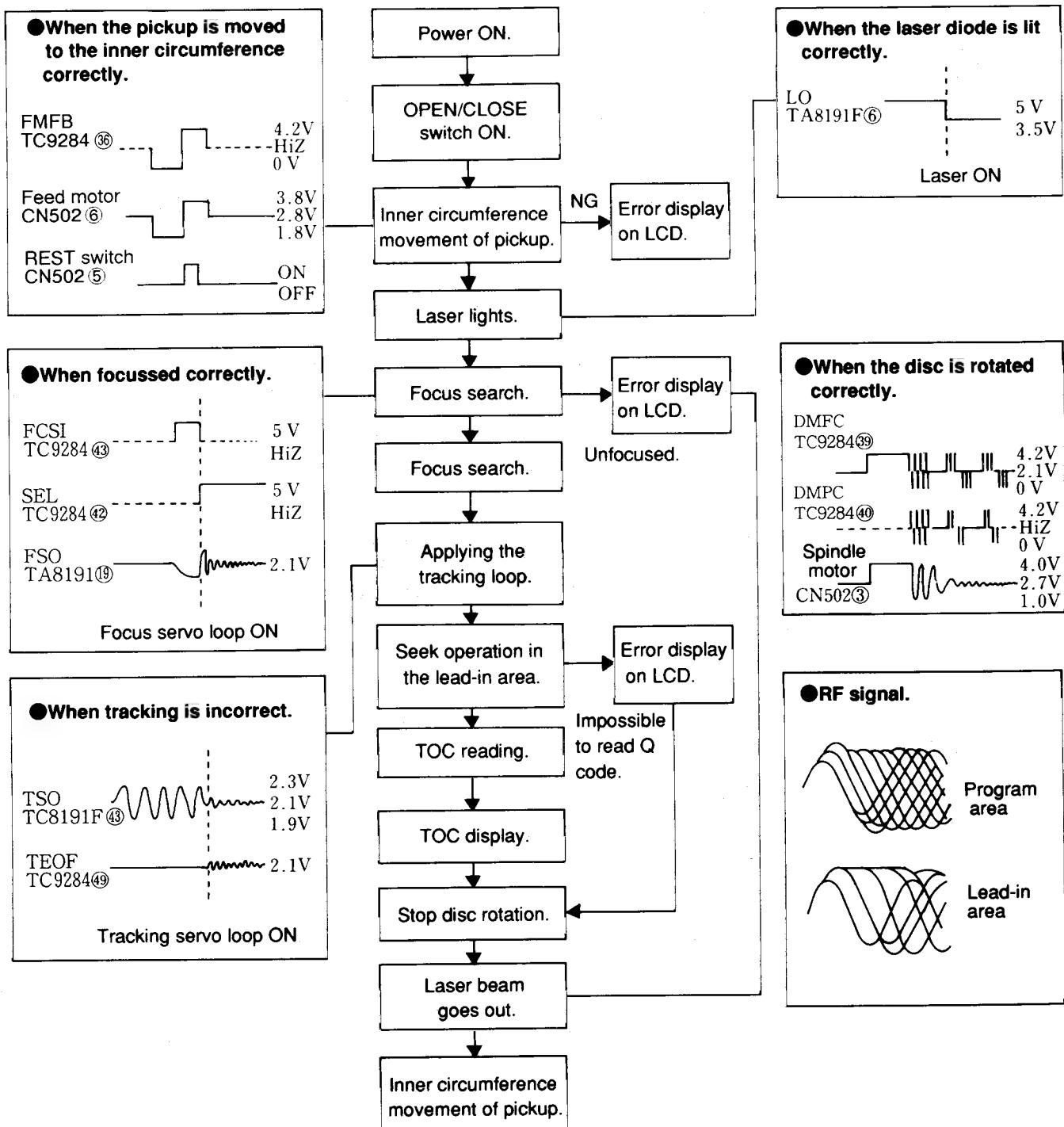


Fig. 7-1

■ General section

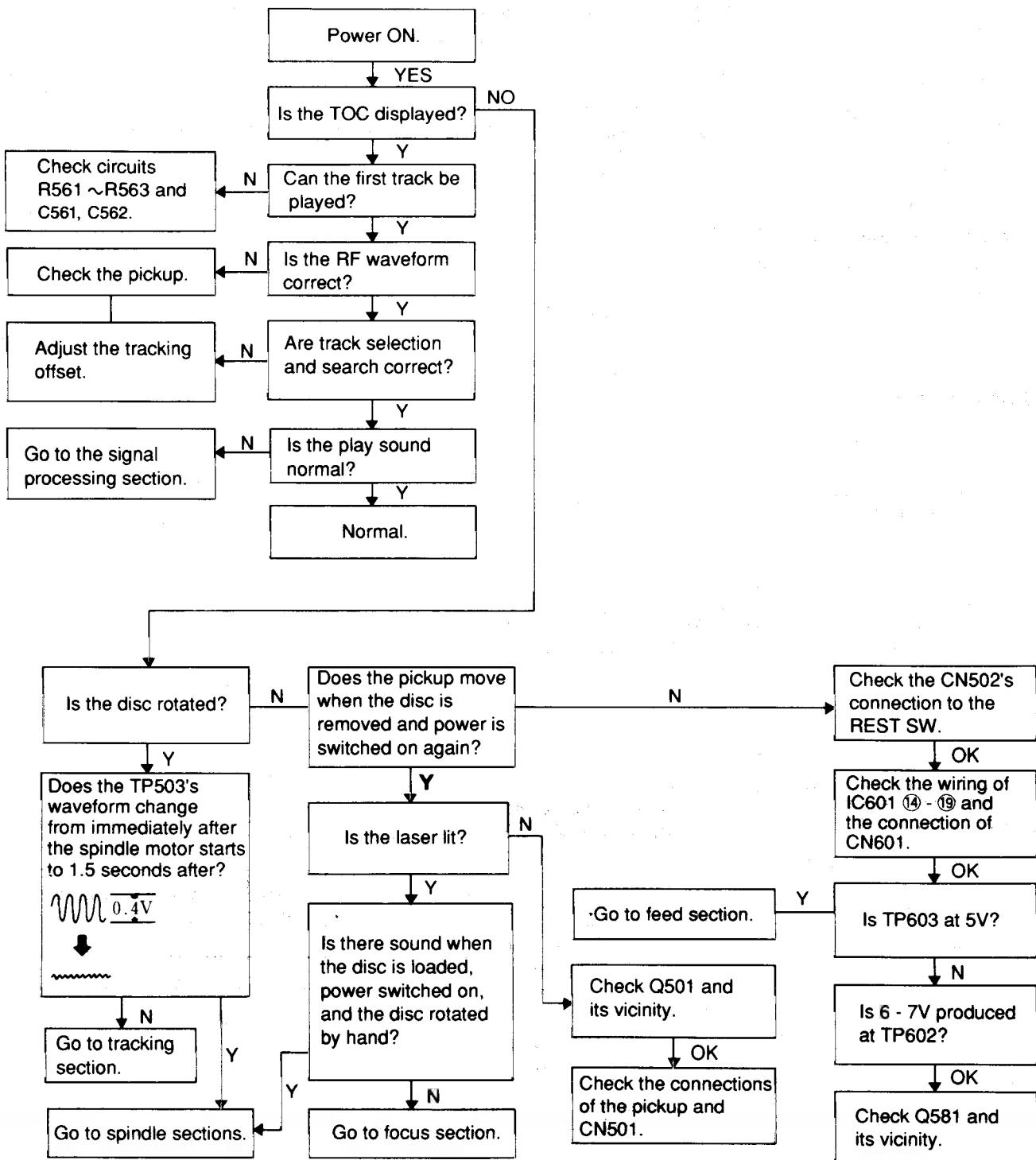


Fig. 7-2

■ Feed section

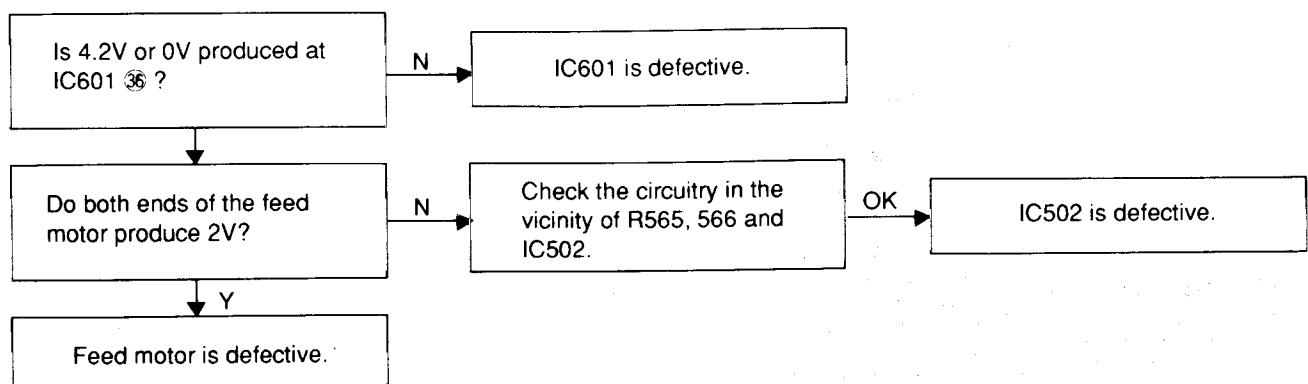


Fig. 7-3

■ Focus section

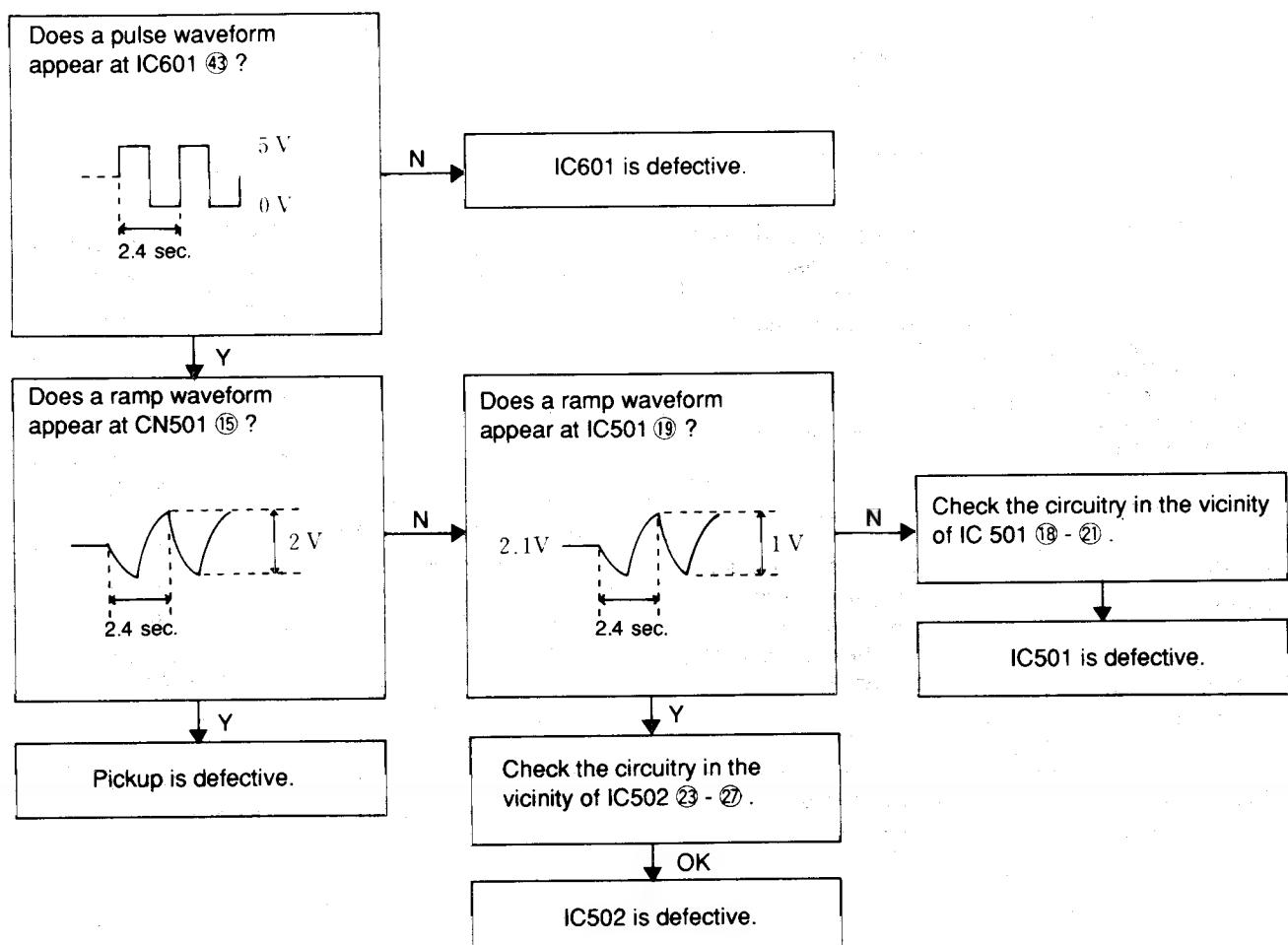


Fig. 7-4

■ Spindle motor section

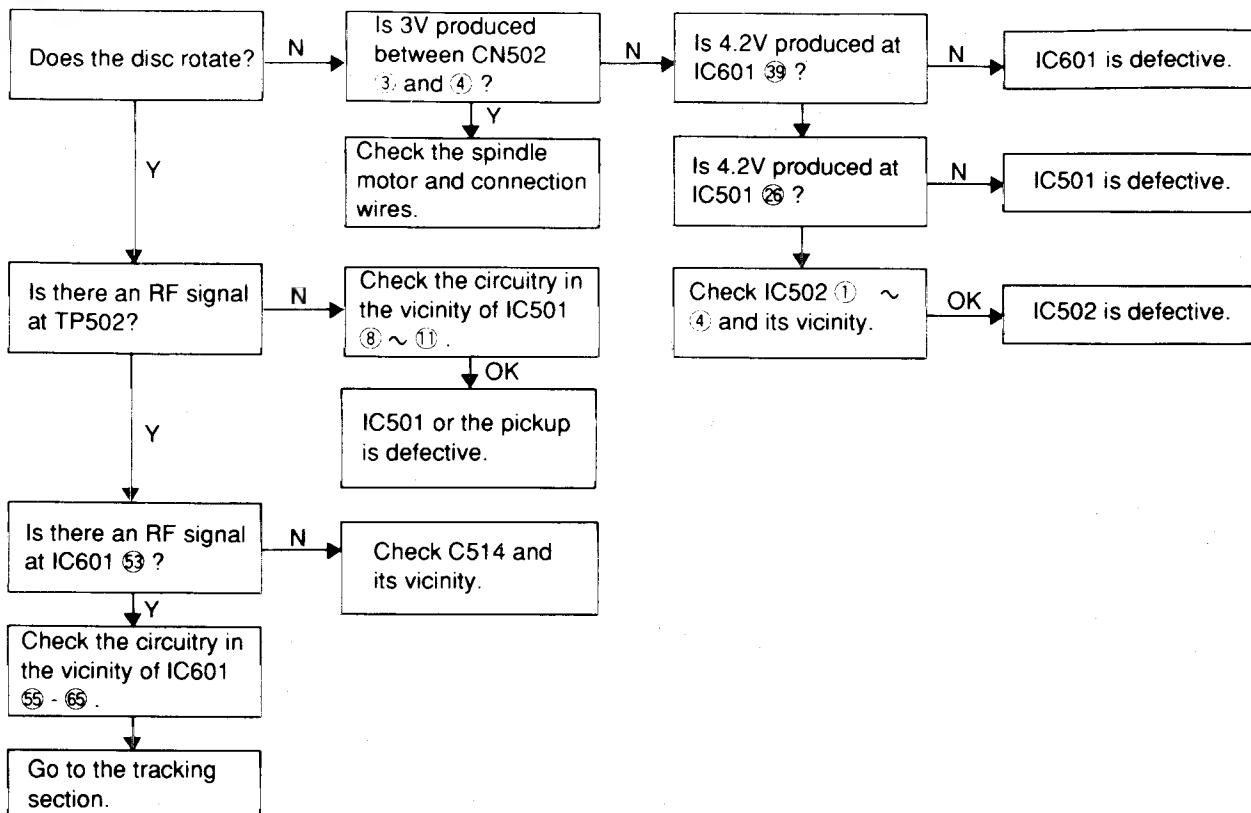


Fig. 7-5

■ Signal processing section

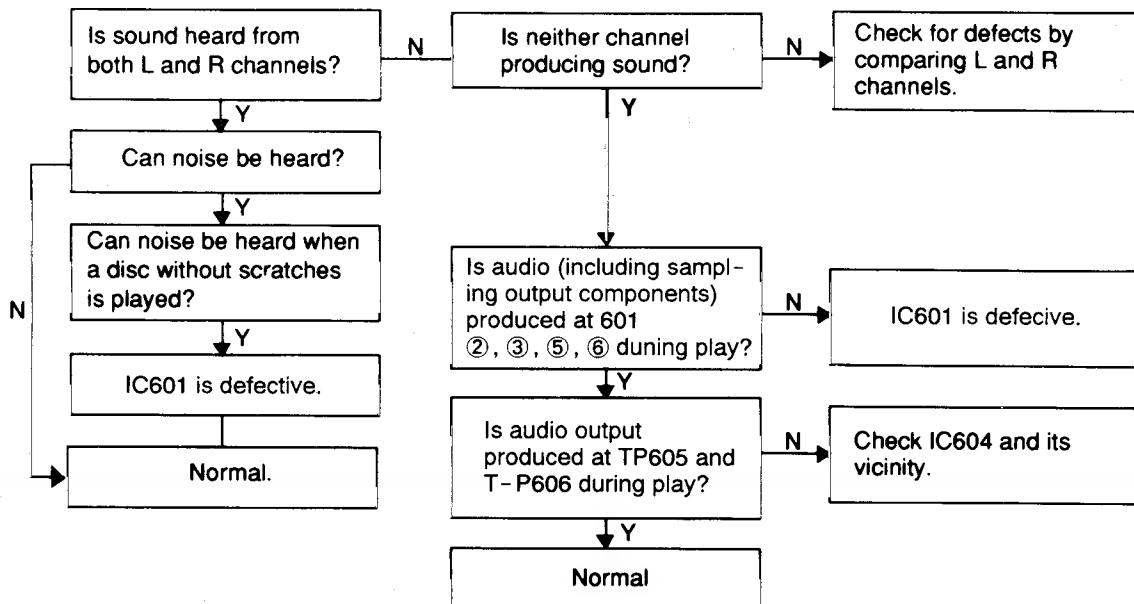


Fig. 7-6

■ Tracking section

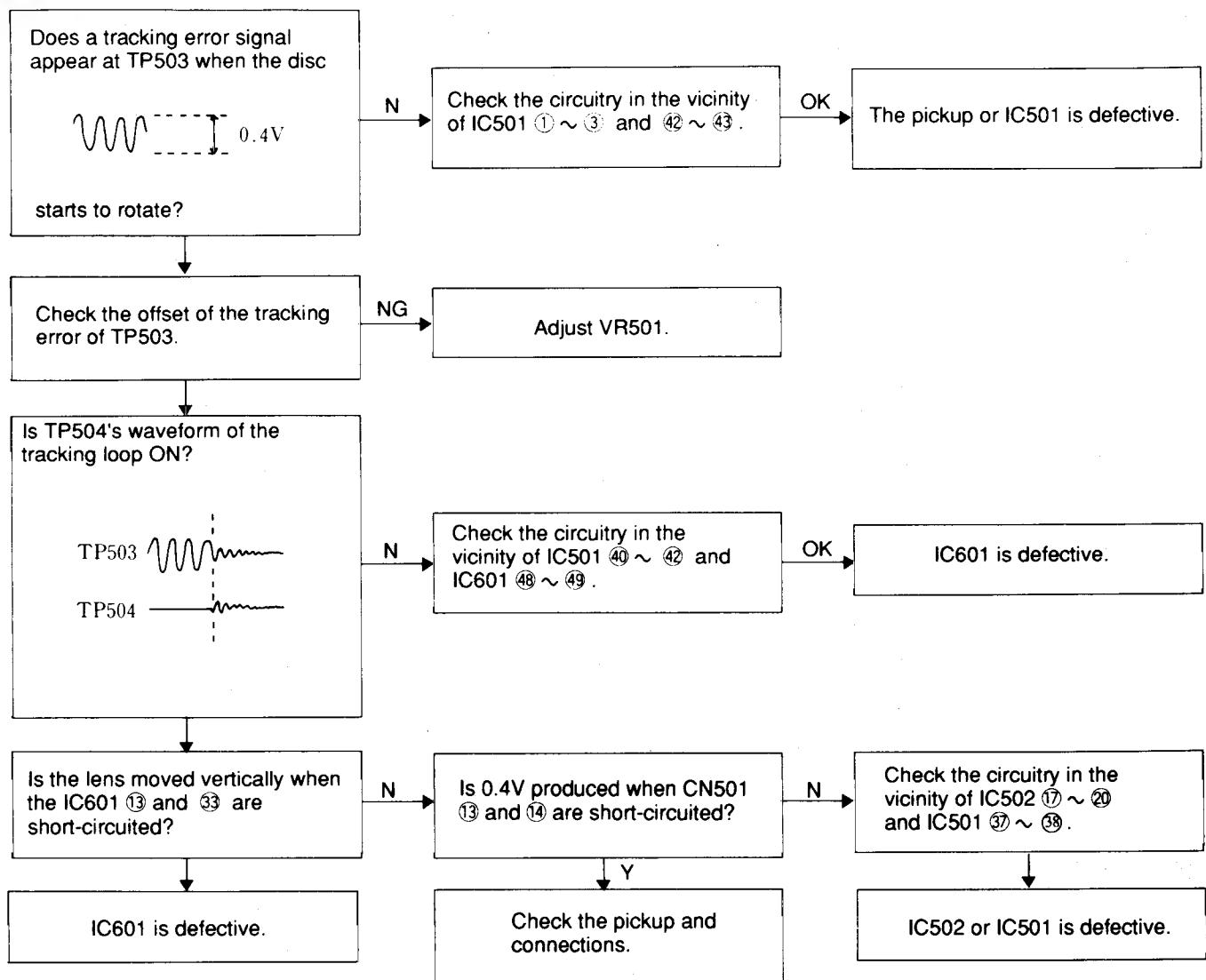


Fig. 7-7

■ Self - Diagnosis Function of CD

1. Purpose

This function is designed to display an error to readily clarify the cause of such an error should any trouble occur in CD.

2. How to Use the Function

- (1) Turn the microcomputer action of the set to [TEST] mode.
- (2) Press **[POWER]** + **[CLEAR]** on the remote controller at the same time. Confirm that all of the LCDs have been turned on when set to the [TEST] mode subsequent to the step in Item (2).
- (3) When the CD trouble has occurred after starting CD, an error code will be displayed on the display section of LCD, etc.

3. Error code and location in trouble

(See Figs. 7 - 8-12)

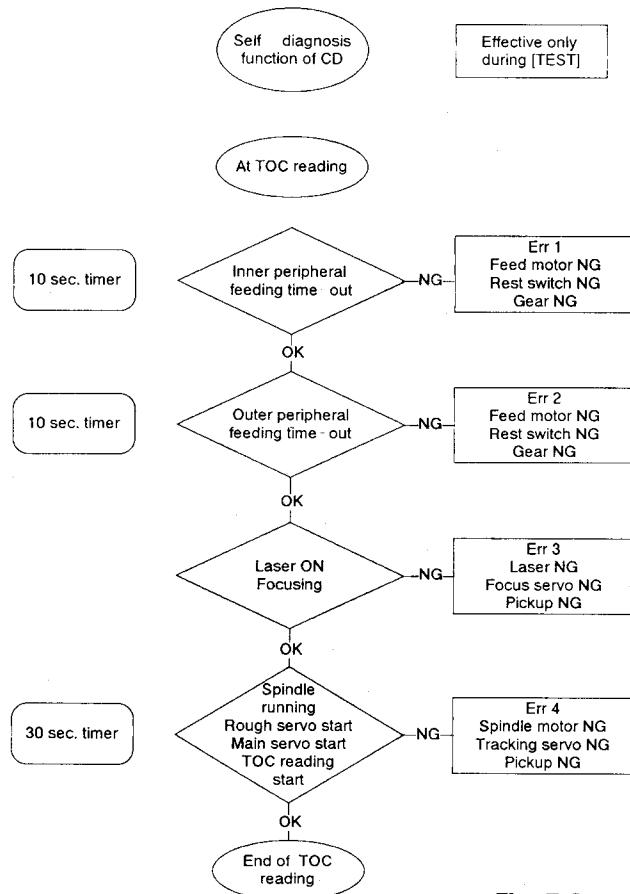


Fig. 7-8

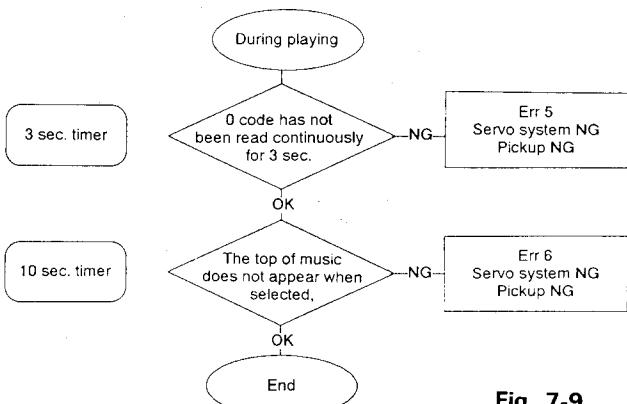


Fig. 7-9

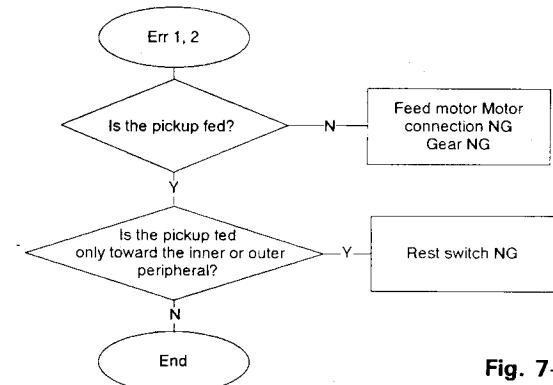


Fig. 7-10

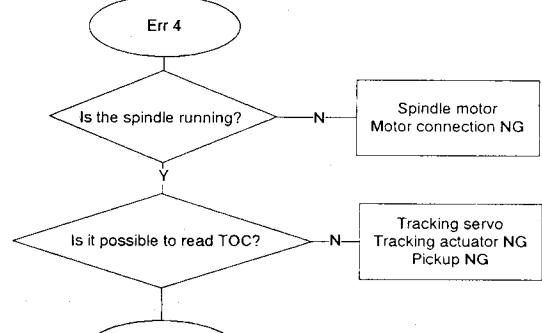


Fig. 7-11

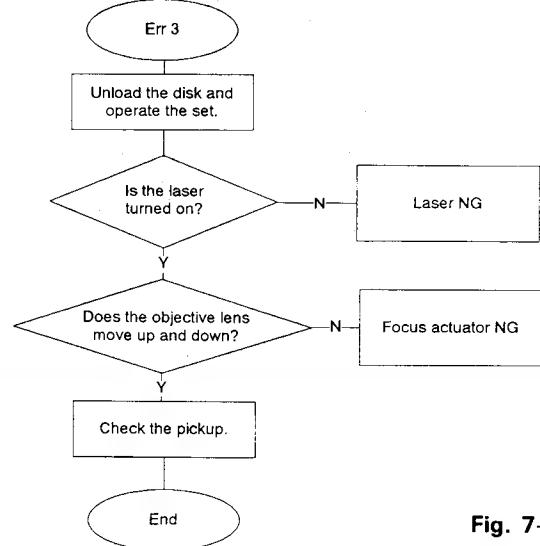
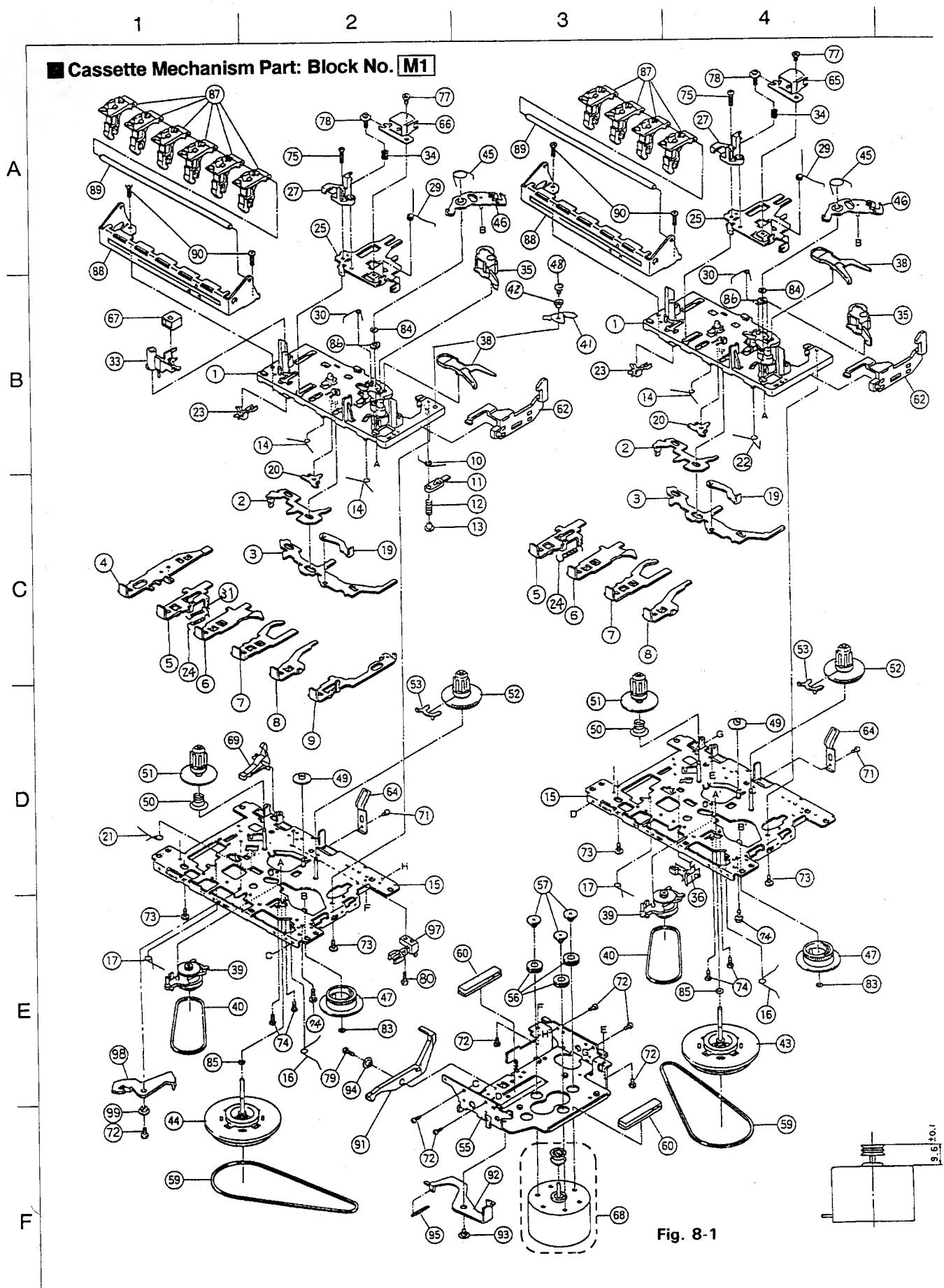


Fig. 7-12

8. Analytic Drawing and Parts List



■ Cassette Mechanism Parts List

BLOCK NO. M1MM

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
1	192114301T	BASE ASS'Y		2		
2	19211409T	SWITCH ACTUATOR		2		
3	19211408T	LOCK CAM		2		
4	19211422T	BUTTON LEVER	REC DECK A	1		
5	19211484T	BUTTON LEVER	PLAY	2		
6	19211424T	BUTTON LEVER	REW	2		
7	19211425T	BUTTON LEVER	FF	2		
8	19211426T	BUTTON LEVER	STOP	2		
9	19211461T	BUTTON LEVER	PAUSE DECK A	1		
10	19211413T	P. CONT. SPRING		1		
11	19211455T	PAUSE LEVER (E)		1		
12	19211412T	SPRING	PAUSE	1		
13	19211411T	PAUSE STOPPER		1		
14	19211414T	TORSION SPRING	BUTTON LEVER	3		
15	192101501T	CHASSIS ASS'Y		2		
16	19211416T	TORSION SPRING	E ACTUATER	2		
17	19211417T	TORSION SPRING	PS LEVER	2		
19	182101159T	E.KICK LEVER		2		
20	19211420T	STOPPER	PINCH ROLLER	1		
21	19211421T	TORSION SPRING	REC BUTTON	1		
22	19211433T	TORSION SPRING	SPRING C	1		
23	MSW-1541T	LEAF SWITCH	MSW-1541T	2		
24	18210150T	SPRING	PLAY BUTTON	2		
25	19210311T	HEAD PANEL		2		
27	19210304AT	HEAD BASE		2		
29	19210309T	PANEL P SPRING		2		
30	19211418AT	SPRING	M CONTROL	2		
31	18211311T	TENSION SPRING	E SLIDE LEVER	1		
33	19210305T	MAGNET HEAD ARM		1		
34	18210307T	AZIMUTH SPRING		2		
35	192104309T	P.ROLL.ARM ASSY		2		
36	640101161T	LEAF SWITCH	MSW-17820MVDO	1		
38	19212604TT	SENSING LEVER		2		
39	192107304T	RF CLUTCH ASS'Y		2		
40	18210711T	RF.BELT		2		
41	19211434T	P.ROLLER ARM		1		
42	19211437T	P ARM COLLAR		1		
43	192109304ZT	FLYWHEEL ASS'Y		1		
44	192109303ZT	FLYWHEEL ASS'Y		1		
45	19212605T	TORSION SPRING		2		
46	192126502ZT	GEAR PLATE ASSY		2		
47	19212602T	CAM GEAR		2		
48	99992041T	SPECIAL SCREW	M2 X 3	1		
49	18211070T	F.FORWARD GEAR		2		
50	18211099T	BACK TENSION SP		2		
51	192105304T	S. REEL ASS'Y		2		
52	192105303T	T. REEL ASS'Y		2		
53	19210506T	SENSOR		2		
55	19211211T	MOTOR BRACKET		1		
56	18211266T	MOTOR RUBBER		3		
57	18511418T	COLLAR SCREW	FOR MOTOR	3		
59	19210923T	MAIN BELT		2		
60	19211212T	MAT		2		
62	19211302T	EJ. SLIDE LEVER		2		

BLOCK NO. M1MM 1111

A	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	64	18291001T	PACK SPRING		2		
	65	MS15R-AA2N1	R/P HEAD		1		
	66	MS15R-AA2N1	R/P HEAD		1		
	67	PHK-MSI-6A	E HEAD		1		
	68	1921123065T	MOTOR ASS'Y		1		
	69	18211069T	REC.SAF.LEVER		1		
	71	91790000T	TAPPING SCREW	M2 X 3	2		
	72	91800000T	SCREW	M2 X 4	7		
	73	96790000T	TAPPING SCREW	M2 X 5	4		
	74	99991809T	SPECIAL SCREW	M2 X 4.5	6		
	75	SPSP2006Z	SCREW	M2 X 6	2		
	77	SDSP2003Z	SCREW	M2 X 3	2		
	78	SPSP2007Z	SCREW	M2 X 7	2		
	79	91820000T	SCREW	M2 X 6	1		
	80	91810000T	SCREW	M2 X 5	1		
	83	94220000T	POLY.CUT WASHER	1.2X3.8X0.3	2		
	84	99990313T	POLY.CUT WASHER	1.45X3.8X0.5	2		
	85	98820000T	P WASHER	2X3.5X0.4	2		
	86	99990003T	POLYSLIDER WAS.	2.1X4X0.13	2		
	87	18213107T	OPERATION LEVER		10		
	88	18213106T	BUTTON FRAME		2		
	89	18293103T	LEVER SHAFT		2		
	90	99991402T	MINI SCREW	M2 X 8	4		
	91	19211209T	P.KICK LEVER(B)		1		
	92	18211268T	P.KICK LEVER		1		
	93	18211223T	COLLAR SCREW		1		
	94	18211265T	COLLAR (B)		1		
	95	18211312T	SPRING		1		
	97	64010138T	LEAF SWITCH		1		
	98	19210201T	REC ARM		1		
	99	19211437T	P ARM COLLAR		1		

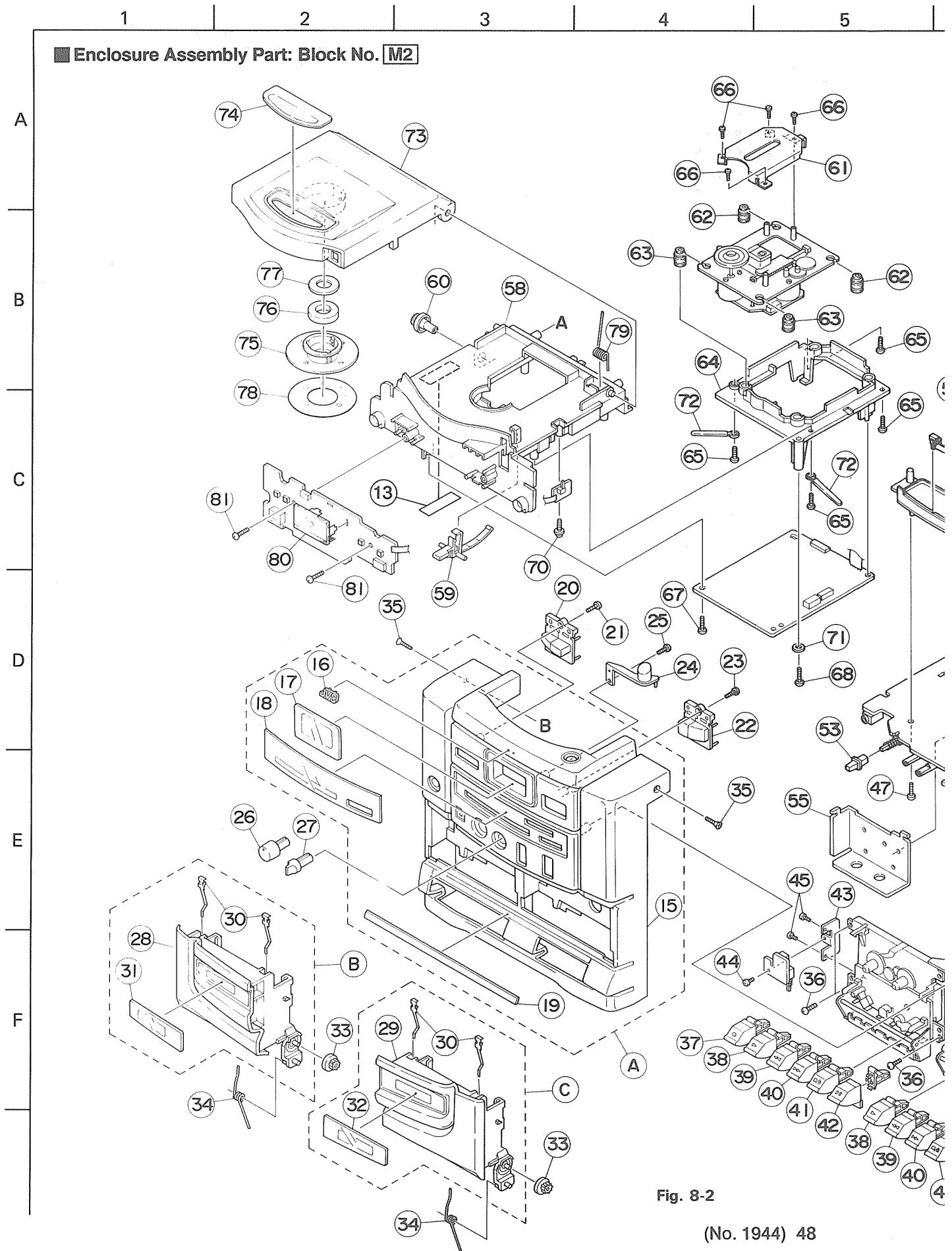
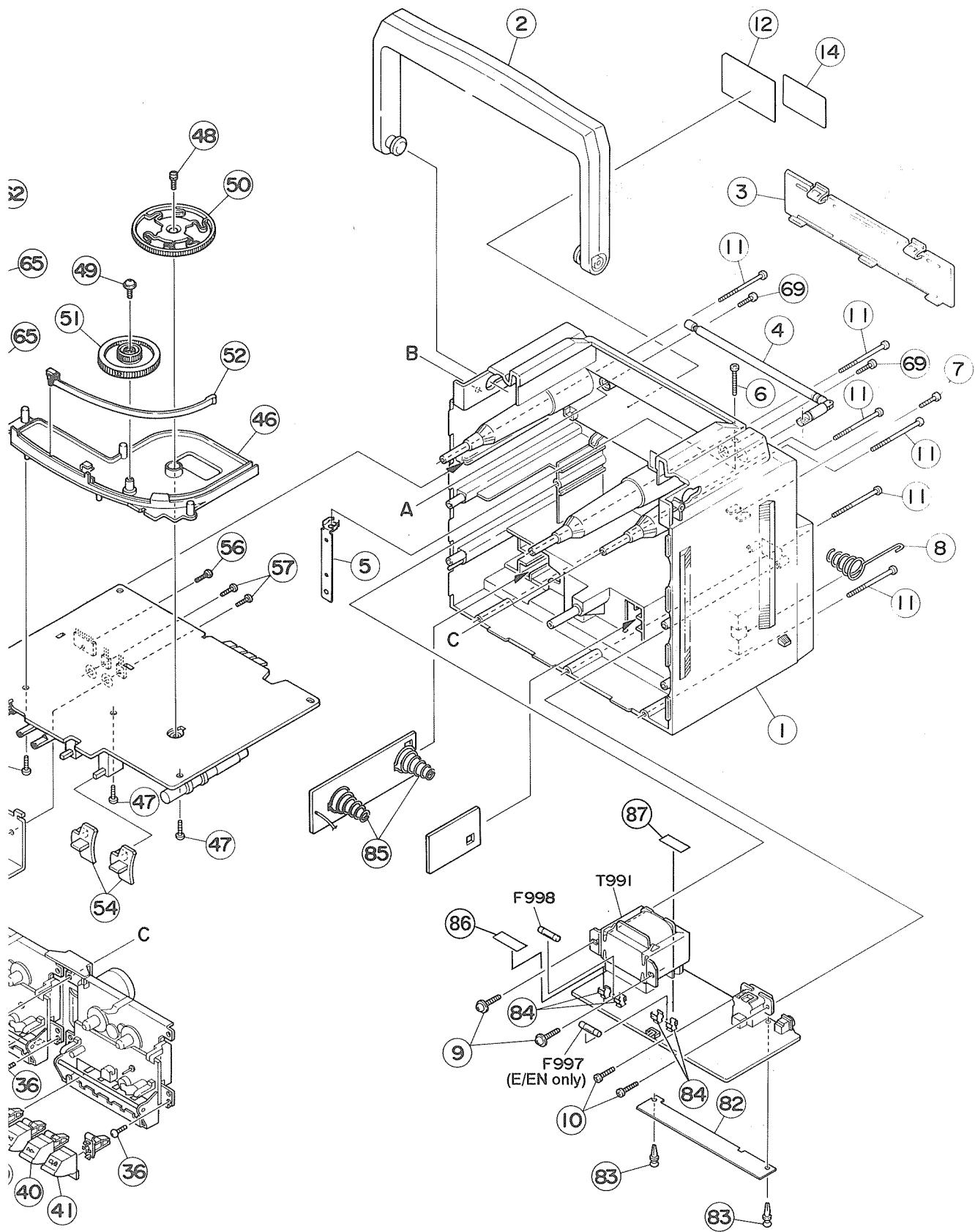


Fig. 8-2



■ Enclosure Assembly Parts List

BLOCK NO. M2MM

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
A	A ZCPRX75K-FB B ZCPRX75K-CBA C ZCPRX75K-CBB 1 FMJC1009-002 2 FMJH2002-001	FRONT CABINET CASSETTE CASE A CASSETTE CASE B REAR CABINET HANDLE	REF.15-19 REF.28,30,31 REF.29,30,32	1 1 1 1 1		
	3 VJC2003-025 4 FMJA3001-00A(D) 5 FMKL4005-001 6 SDSP3012N 7 SBST3020M	BATTERY COVER ROD ANT ASSY ANTENNA TERMINA SCREW SCREW		1 1 1 1 1		
	8 VYH5657-001 9 GBSF4020Z 10 SBSF3010Z 11 SBSF3050Z 12 FMYN7004-M005T	BATTERY SPRING SCREW TAP.SCREW SCREW NAME PLATE	FOR ANTENNA TER	1 2 2 6 1		
A	FMYN7004-M015T FMYN7004-M008T FMYN7004-M002T FMYN7004-M009T FMYN7004-M012T	NAME PLATE NAME PLATE NAME PLATE NAME PLATE NAME PLATE		1 1 1 1 1	GI G B EN VX	
	13 E406709-001 14 E70891-001 15 FMJC1008-002 16 VJD5429-001 17 FMJK4006-001	LASER CAUTION CLASS 1 LABEL FRONT CABINET JVC MARK LCD LENS		1 1 1 1 1		
	18 FMJK3002-002 19 FMJD3002-001 20 FMXP3009-001 21 SBSF2608Z 22 FMXP3010-001	DIAL LENS CONTROL PLATE CD BUTTON (A) TAP.SCREW CD BUTTON (B)	SEARCH FOR CD BUTTON (C) PLAY/PAUSE	1 1 1 1		
	23 SBSF2608Z 24 FMXP4003-002 25 SBSF2608Z 26 VXL4421-001 27 VXL4422-001	TAP.SCREW CD EJECT BUTTON TAP.SCREW VOLUME KNOB KNOB	FOR CD BUTTON (C) CD EJECT BUTTON FOR CD EJECT BU BASS/TRE.	1 1 1 1		
	28 FMJT2002-001 29 FMJT2002-002 30 VKY4180-001 31 FMJK4007-001 32 FMJK4008-001	CASSETTE DOOR(A) CASSETTE DOOR(B) CASSETTE SPRING CASSETTE LENS(A) CASSETTE LENS(B)		1 1 4 1 1		
	33 VYH5601-001 34 FMKW4004-001 35 SSSF3010M 36 SBSF3012Z 37 VXP3348-201	GEAR DOOR SPRING T SCREW TAP.SCREW BUTTON	FRONT + REAR SC MECHA + REAR CA A/REC	2 2 2 4 1		
	38 VXP3348-203 39 VXP3348-204 40 VXP3348-205 41 VXP3348-206 42 VXP3348-207	BUTTON BUTTON BUTTON BUTTON BUTTON	A,B/PLAY A,B/REW A,B/FF A,B/STOP A/PAUSE	2 2 2 2 1		
	43 FMKL4001-001 44 SDST2605Z 45 SDST2004Z 46 FMYH2001-002 47 SBSF3010Z	BRACKET SCREW SCREW TUNER CHASSIS TAP.SCREW	FIX TO MECHA FOR REC.LEVER	1 1 2 1 3		

BLOCK NO. M2MM

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
48	LPSP2606Z	SCREW		1		
49	GBSF3010Z	TAP.SCREW	GEAR+TUNER CHAS	1		
50	FMKS3001-001	DIAL DRUM		1		
51	FMXL4003-001	TUNING KNOB		1		
52	FMJN4001-001	NEEDLE		1		
53	FMXP4005-001	PUSH BUTTON		1		
54	FMXQ4001-001	LEVER KNOB		2		
55	FMMH3001-001	HEAT SINK		1		
56	SBSF3008Z	TAP.SCREW	FOR IC	1		
57	SBSF3008Z	TAP.SCREW	FOR TRANSISTOR	2		
58	FMJD1001-004	CD CASE		1		
59	FMKS4001-001	LOCK ARM		1		
60	VYH4769-002	GEAR		1		
61	VJD5410-204	PICK COVER		1		
62	FMYH4003-001	INSULATOR		2		
63	FMYH4003-002	INSULATOR		2		
64	FMYH3002-002	CD MECHA HOLDER		1		
65	SBSF3010Z	TAP.SCREW	CD MEC.HOL.+CAS	4		
66	SDSF2006M	SCREW	CD MEC.+PICK CO	4		
67	SBSF3010Z	TAP.SCREW	CD PWB+CASE	1		
68	E65923-004	T.SCREW	CD PWB+CD MECHA	1		
69	SBSF3010Z	TAP.SCREW	CD CASE&REAR CA	2		
70	E65923-003	T.SCREW	OP/CL PWB	1		
71	FMYSP201-001	WASHER		1		
72	VKZ4001-110	WIRE HOLDER		2		
73	FMJT1001-002	CD DOOR		1		
74	FMJK4001-001	CD LENS		1		
75	VKS3547-001	CLAMPER		1		
76	E74897-002	C.D. MAGNET		1		
77	VYH7314-001	YOKER		1		
78	VYH7315-203	PAD		1		
79	FMKW4001-002	CD DOOR SPRING		1		
80	FMKL4002-002	LCD HOLDER		1		
81	SBSF3010Z	TAP.SCREW	CD CASE+CD PWB	2		
82	FMYTS301-001	SHEET		1		
83	FMYH4004-001	FINE TUN.HOLDER		2		
84	VMZ0125-001Z	FUSE CLIP	F997 FUSE CLIP	2		
85	VMZ0125-001Z	FUSE CLIP	F998 FUSE CLIP	2		
	FMKW4003-001	SPRING	SP02	2		
	FMKW4003-001	SPRING	SP01	2		
86	VND4003-053	FUSE LABEL	F998	1		
87	VND4003-053	FUSE LABEL	F997	1	E,EN	
F 997	QMF51E2-3R15J1	FUSE		1	E,EN	
F 998	QMF51E2-3R15J1	FUSE		1		
T 991	FMT57J2-12A	POWER TRANS	FOR EUROPE	1		

1 2 3 4 5 6 7 8

■ CD Mechanism Assembly
:Block No. **M3**

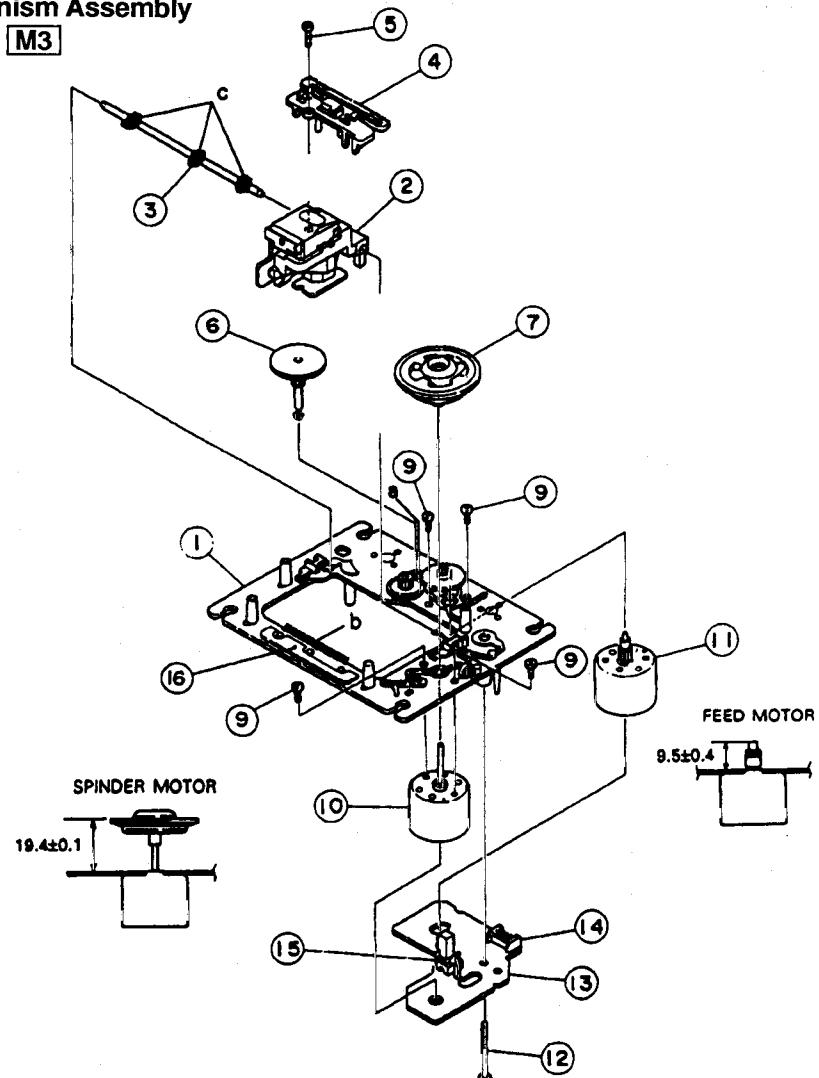


Fig. 8-3

● CD Mechanism Assembly Parts List

BLOCK NO. **M3MM**

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
1	EPB-002A	MECHA BASE ASSY		1		
2	OPTIMA-6S	OPTICAL PICK-UP		1		
3	E406777-001	GUIDE SHAFT		1		
4	E307746-001	CD RACK		1		
5	SDSF2006Z	SCREW		1		
6	EPB-003A	MECHA GEAR		1		
7	E75807-301	TURN TABLE		1		
9	SDSP2003N	SCREW		3		
10	E406783-001	DC MOTOR		1		
11	E406784-001SA	DC MOTOR ASSY		1		
12	E75832-001	SPECIAL SCREW		1		
13	EMW10190-001	PRINTED BOARD		1		
14	EMV5109-006B	CONN. TERMINAL		1		
15	ESB1100-005	LEAF SWITCH		1		
16	E407212-001	DAMPER		1		

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■ Speaker Box: Block No. M4

A

B

C

D

E

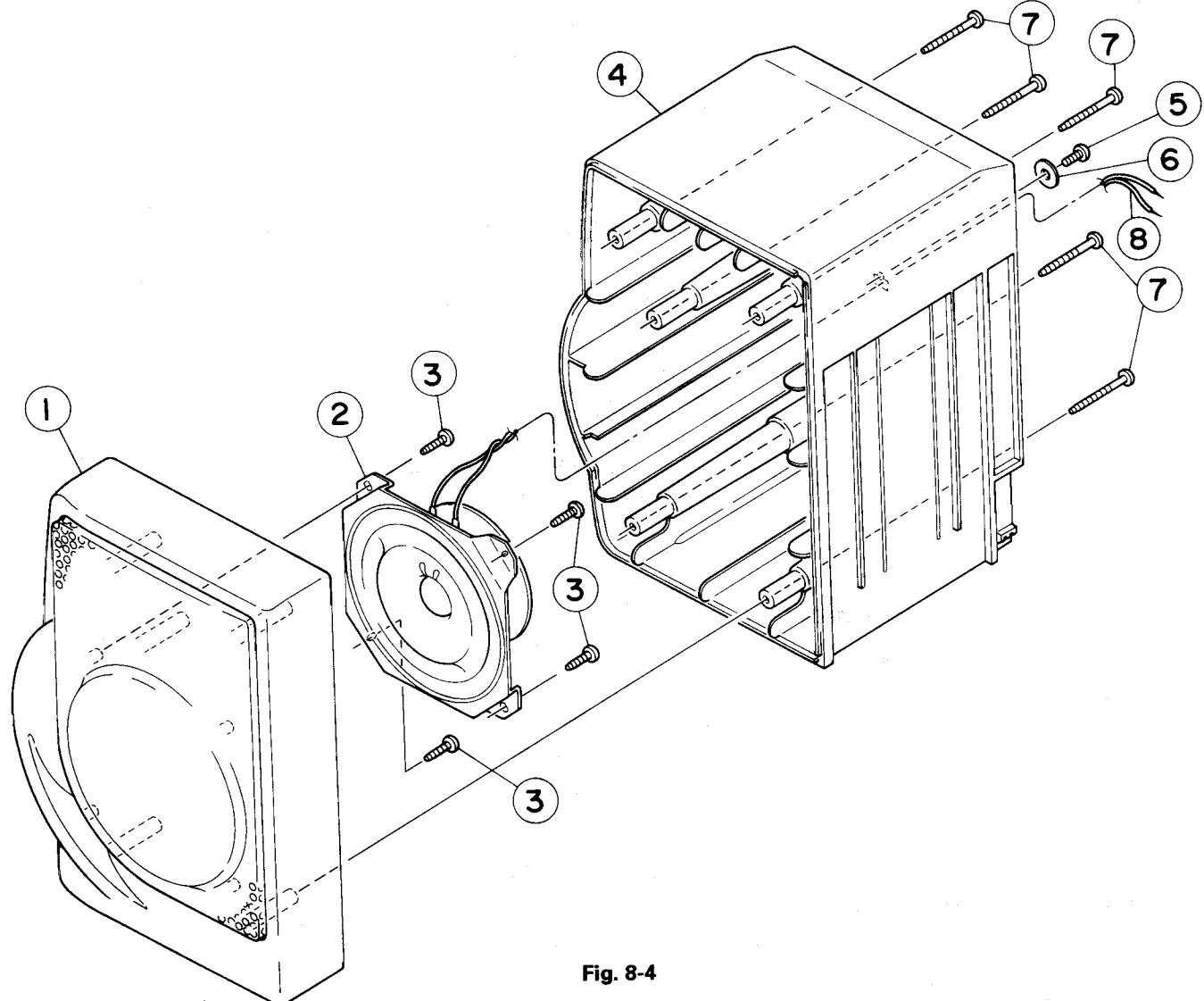


Fig. 8-4

● Speaker Box Parts List

BLOCK NO. M4MM

REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
1	FMJC2002-00A FMJC2001-00A	SP F PANEL ASY SP F PANEL ASY	LEFT RIGHT	1 1		
2	FMGS1002-001	SPEAKER		1		
3	SBSF3010Z	TAP.SCREW	SPEAKER + FRONT	4		
4	FMJC1006-001	SP REAR CAB(L)		1		
	FMJC1004-001	SP REAR CAB(R)		1		
5	SBSF3008M	SCREW	SPEAKER CORD	1		
6	VYSS2R7-006	SPACER	FOR SPK CORD	1		
7	SBSF3035Z	TAP.SCREW	FRONT + REAR	4		
8	VMP0040-002T	SPEAKER CORD		1		

9. Block Diagram

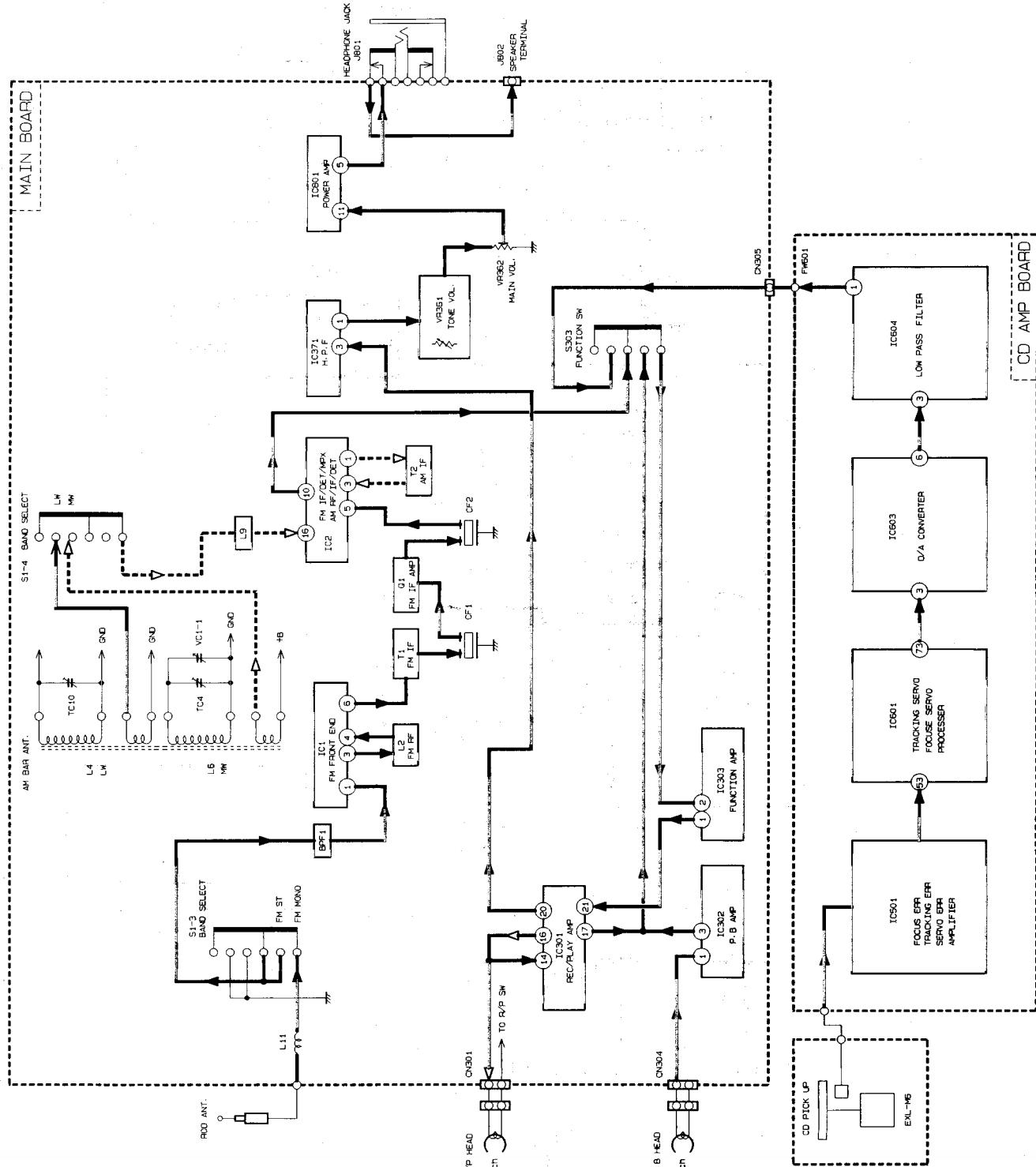


Fig. 9-1

10. Wiring Connection

Color codes are shown below.

- 1 Brown
- 2 Red
- 3 Orange
- 4 Yellow
- 5 Green
- 6 Blue
- 7 Violet
- 8 Gray
- 9 White
- 0 Black
- D Pink
- C Light Blue

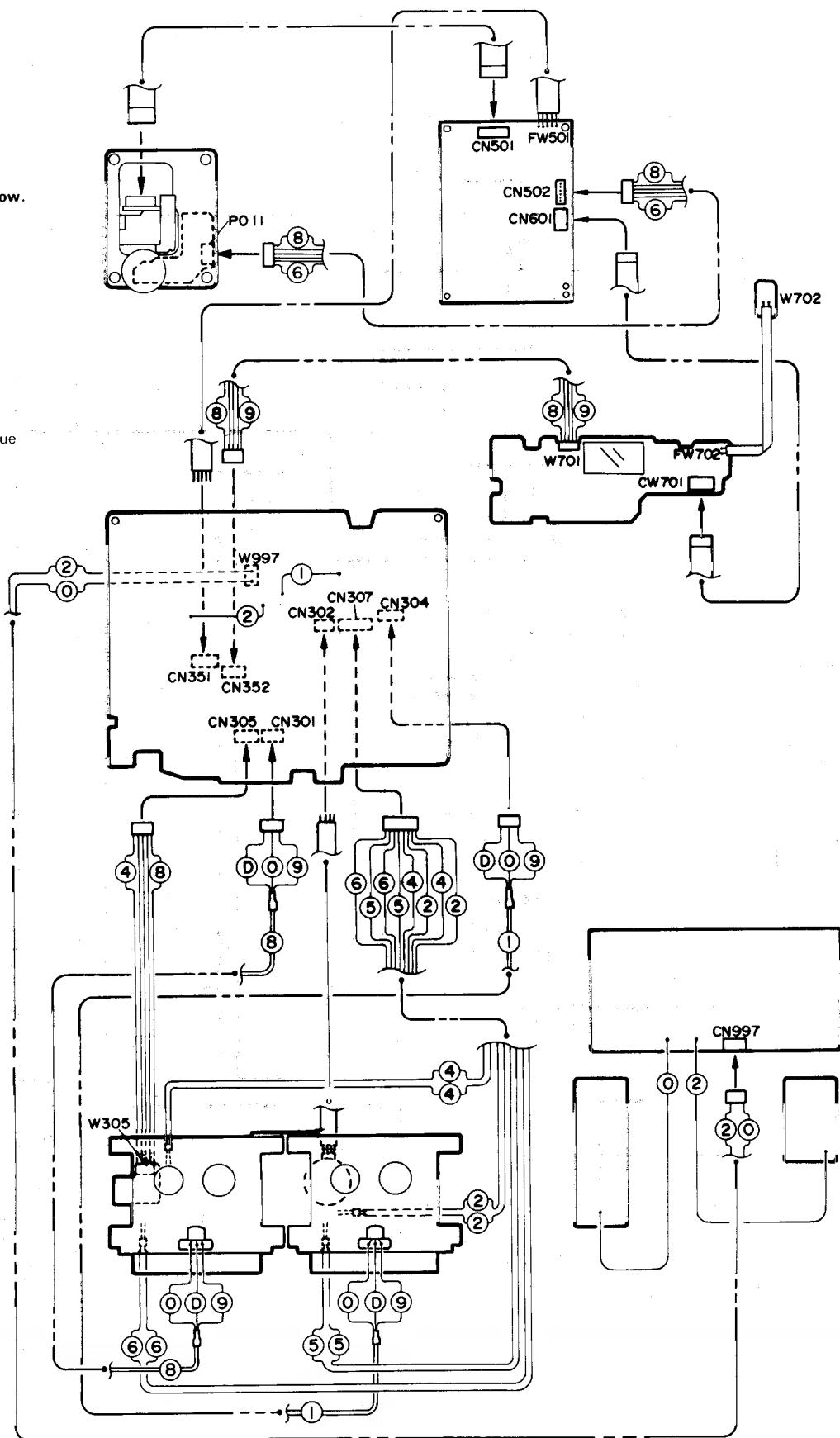


Fig. 10-1

11. Main IC Block Diagram

■ IC601: TC9284AF (1Chip Processor)

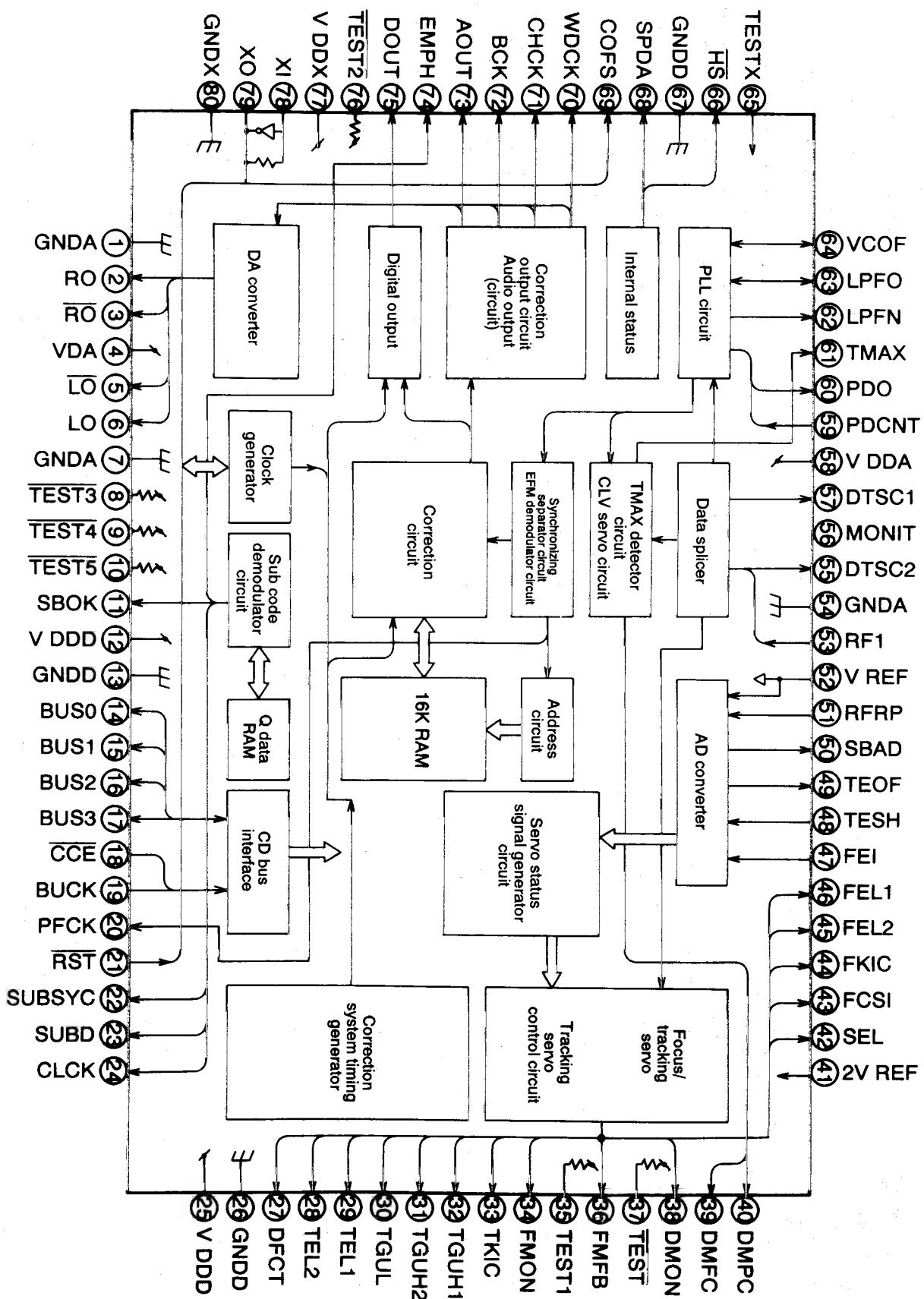


Fig. 11-1

IC601-TC284AF

Terminal No.	Designation of Terminal	I/O	Description of Function
1	GNDA	—	R channel analog ground terminal of D/A converter
2	RO	0	Forward output terminal of R channel data
3	\overline{R} O	0	Reverse output terminal of R channel data
4	VDA	—	Power supply terminal to D/A converter
5	\overline{L} O	0	Reverse output terminal of L channel data
6	LO	0	Forward output terminal of L channel data
7	GNDA	—	L channel analog ground terminal of D/A converter
8	TEST3	1	Test terminal. Normally at "H" or open (with pullup resistor)
9	TEST4	—	Test terminal. Normally, it is a "H" or open (with pullup resistor).
10	TEST5	—	Test terminal. Normally, it is a "H" or open (with pullup resistor).
11	SBOK	0	CRCC decision result output terminal of sub code Q data. It is at "H" when the result is OK.
12	V_{ee}	—	Digital power supply voltage terminal (+5V)
13	GNDD	—	Digital ground terminal
14	BUS0	—	Microcomputer interface data input/output terminal.
15	BUS1	I/O	(With Schmidt input, open drain output and pull-up resistor)
16	BUS2	—	Microcomputer interface chip enable signal input terminal. BUS 3-0 is active when the terminal is at "H" (Schmidt input)
17	BUS3	—	Microcomputer interface clock input terminal (Schmidt input)
18	\overline{GCE}	1	Microcomputer interface frame sink signal output terminal. It is at "H" during resetting
19	BUCK	1	Reset signal input terminal. It is at "L" during resetting (with pull-up resistor)
20	PFCK	0	Playback system frame sink signal output terminal
21	\overline{RST}	—	Sub code block sink output terminal. It is at "H" at S1 position when the sub code sink is detected.
22	SUBSYC	0	Sub code P-W output terminals
23	SUBD	0	Sub code P-W data reading clock input terminal
24	CLK	1	Digital power supply voltage terminal (+5V)
25	V_{ee}	—	Digital ground terminal
26	GNDD	—	Defect detector signal output terminal. It is at " V_{ee} " during detection of defect, but at "H" under normal conditions.
27	DFCT	0	Tracking gain adjusting analog switch output terminal. It is at " V_{ee} " during gain adjustment, but at "H" under normal conditions.
28	TEL2	0	Tracking servo gain amplifier analog switch output terminal. It is at " V_{ee} " during normal playback by command.
29	TEL1	—	Tracking servo gain amplifier analog switch output terminal. It is possible to select the polarity at gain amplifier and normal playback by command.
30	TGUL	0	Focus search

Terminal No.	Designation of Terminal	I/O	Description of Function
31	TGUH2	0	Tracking servo gain amplifier analog switch output terminal. It is at " V_{ee} " at gain amplifier, but at "H" under normal conditions. Although TGUH1 is used during normal playback, TGUH2 is used during double speed playback.
32	TGUH1	0	Tracking actuator kick signal output terminal. It is used as a kick signal output terminal during adjustment of NKIC _x and CKIC _x tracking gains. Kicking is in outer peripheral direction at "2 V_{ee} " and inner peripheral direction at "L". Normally, this terminal is at "H". Three values are output (2 V_{ee} , HIZ and GNDA).
33	TKIC	0	Feed servo ON/OFF analog switch output terminal. It is at "HIZ" when servo is on, but at " V_{ee} " when servo is off.
34	FMON	0	Test terminal. It is normally at "H" or open (with pull-up resistor).
35	TEST1	1	Feed motor FWD/BWD feed control signal output terminal. Feeding is in outer peripheral direction at "2 V_{ee} " and inner peripheral direction at "L". Normally, this terminal is at "HIZ". Three values are output (2 V_{ee} , HIZ and GNDA).
36	FMFB	0	Test terminal. It is normally at "H" or open (with pull-up resistor).
37	TEST	1	Gain selector analog switch output terminal of disc motor drive circuit. By command, it is possible to select "HIZ" when CLV servo is off and "HIZ/ V_{ee} " when the servo is off.
38	DMON	0	Disc motor CLV servo AFC signal output terminal. Three values are output (2 V_{ee} , V_{ee} and GNDA).
39	DMFC	0	action Command DMFC output Motor acceleration DMFK "2 V_{ee} " CLV servo ON DMSV AFC signal (PWM) Motor brake ON DMBK "L" CLV servo OFF DIMOFF " V_{ee} "
40	DMPC	0	Disc motor CLV servo APC signal output terminal. Three values are output (2 V_{ee} , HIZ and GNDA).
41	$2V_{ee}$	—	Analog reference power supply terminal (Twice the " V_{ee} " voltage)
42	SEL	0	Servo mode indicator signal output terminal for ON/OFF control of laser diode (LD) and focus servo. Three values are output (V_{ee} , HIZ and GNDA).

Terminal No.	Designation of Terminal	I/O	Description of Function	I/O	Description of Function		
43	FCSI	0	Focus actuator drive signal terminal at [FOCUS SEARCH] mode. The lens is driven in distant direction from disc at "V _{ss} " but in approaching direction to the lens at "L". Normally, this terminal is at "HIZ". Three values are output (V _{ss} , HIZ and GND).	64	VCOF	0	VCO filter terminal
44	FKIC	0	Focus actuator drive signal output terminal at [FOCUS GAIN ADJUST] mode. The lens is driven in distant direction from disc at "V _{ss} " but in approaching direction to the lens at "L". Normally, this terminal is at "HIZ". Three values are output (V _{ss} , HIZ and GND).	65	TESTX	—	Test terminal. It is normally at "H" or "L".
45	FEL2	0	Focus gain adjusting analog switch output terminal.	66	HS	0	Double speed mode output terminal. Although "H" is output during normal playback, "L" is output during double speed playback.
46	FFL1	0	Focus error signal terminal (Analog input)	67	GNDD	—	Digital ground terminal
47	FEI	—	Focus error signal input terminal (Analog input)	68	SPDA	0	Processor status signal output terminal
48	TESH	—	Tracking error signal sample hole analog switch input terminal (Analog input)	69	COFS	0	Correction system frame clock (7.35kHz) output terminal
49	TEOF	0	Tracking servo action(actuator) ON/OFF analog switch input terminal (Analog input)	70	WDCK	0	Word clock (88.2kHz) output terminal. By microcomputer command, it is possible to select SUBQ, BUFOV and IPF signals.
50	SBAD	—	Sub beam adder signal input terminal (Analog input)	71	CHCK	0	Channel clock (44.1kHz) output terminal. "L" at L channel and "H" at R channel.
51	RFRP	—	RF ripple signal input terminal (Analog input)	72	BCK	0	Bit clock (1.4112MHz) output terminal
52	V _{ss}	—	Analog reference power supply terminal	73	AOUT	0	Audio data output terminal
53	RFI	—	RF signal input terminal (Analog input)	74	EMPH	0	Emphasis ON/OFF Indicator signal output terminal. "H" at emphasis ON, but "L" at emphasis OFF.
54	GNDA	—	Analog ground terminal	75	DOUT	0	Digital output terminal
55	DTSC2	0	Data slicer control EFM signal reversion output terminal	76	TEST2	—	Test terminal. It is normally "H" or open (with pull-up resistor).
56	MONIT	0	Internal signal monitor output terminal. It is possible to select EFMO, PLCK and LOCK signals. Muting is also possible.	77	V _{ss}	—	Crystal oscillator power supply terminal
57	DTSC1	0	Data splicer control EFM signal forward output terminal	78	XI	—	Crystal oscillator connection terminal
58	VDAA	—	Analog power supply terminal	79	XO	0	(Crystal oscillator frequency: 16.8344MHz)
59	PDCNT	—	PDO output control terminal. The PDO terminal is forcedly fixed to "HIZ" at "L", but normal output at "H".	80	GNDX	—	Crystal oscillator section ground terminal
60	PDO	0	Phase difference output terminal between EFM and PLCK signals.				
61	TMAX	0	TMAX detection result output terminal.				
62	LPFN	—	Three values are output (2V _{ss} , HIZ and GND).				
63	LPFO	0	Low pass filter amplifier reverse input terminal (Analog input)				

Terminal No.	Designation of Terminal	I/O	Description of Function
43	FCSI	0	Focus actuator drive signal terminal at [FOCUS SEARCH] mode. The lens is driven in distant direction from disc at "V _{ss} " but in approaching direction to the lens at "L". Normally, this terminal is at "HIZ". Three values are output (V _{ss} , HIZ and GND).
44	FKIC	0	Focus actuator drive signal output terminal at [FOCUS GAIN ADJUST] mode. The lens is driven in distant direction from disc at "V _{ss} " but in approaching direction to the lens at "L". Normally, this terminal is at "HIZ". Three values are output (V _{ss} , HIZ and GND).
45	FEL2	0	Focus gain adjusting analog switch output terminal.
46	FFL1	0	Focus error signal terminal (Analog input)
47	FEI	—	Focus error signal input terminal (Analog input)
48	TESH	—	Tracking error signal sample hole analog switch input terminal (Analog input)
49	TEOF	0	Tracking servo action(actuator) ON/OFF analog switch input terminal (Analog input)
50	SBAD	—	Sub beam adder signal input terminal (Analog input)
51	RFRP	—	RF ripple signal input terminal (Analog input)
52	V _{ss}	—	Analog reference power supply terminal
53	RFI	—	RF signal input terminal (Analog input)
54	GNDA	—	Analog ground terminal
55	DTSC2	0	Data slicer control EFM signal reversion output terminal
56	MONIT	0	Internal signal monitor output terminal. It is possible to select EFMO, PLCK and LOCK signals. Muting is also possible.
57	DTSC1	0	Data splicer control EFM signal forward output terminal
58	VDAA	—	Analog power supply terminal
59	PDCNT	—	PDO output control terminal. The PDO terminal is forcedly fixed to "HIZ" at "L", but normal output at "H".
60	PDO	0	Phase difference output terminal between EFM and PLCK signals.
61	TMAX	0	TMAX detection result output terminal.
62	LPFN	—	Three values are output (2V _{ss} , HIZ and GND).
63	LPFO	0	Low pass filter amplifier reverse input terminal (Analog input)

■ Main IC Block Diagram

- Power Amplifier P.C. Board
 - IC304 (POWER AMPLIFIER)
: TA8229K

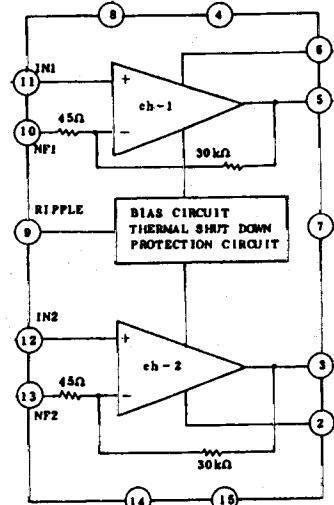


Fig. 11-2

- IC1: TA7358P (N)

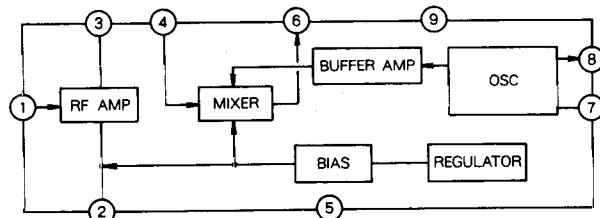


Fig. 11-3

- IC2: TA8186P

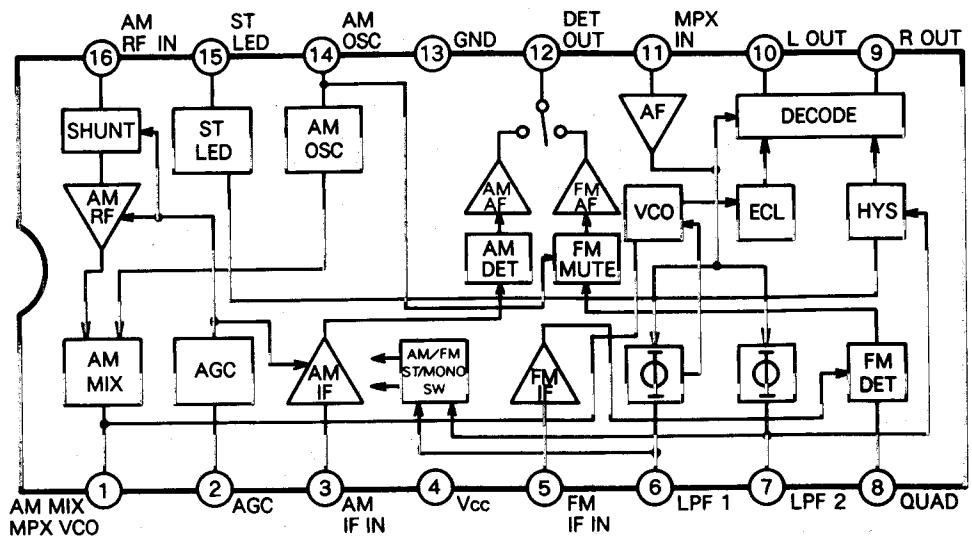


Fig. 11-4

● IC301: TA7417AP

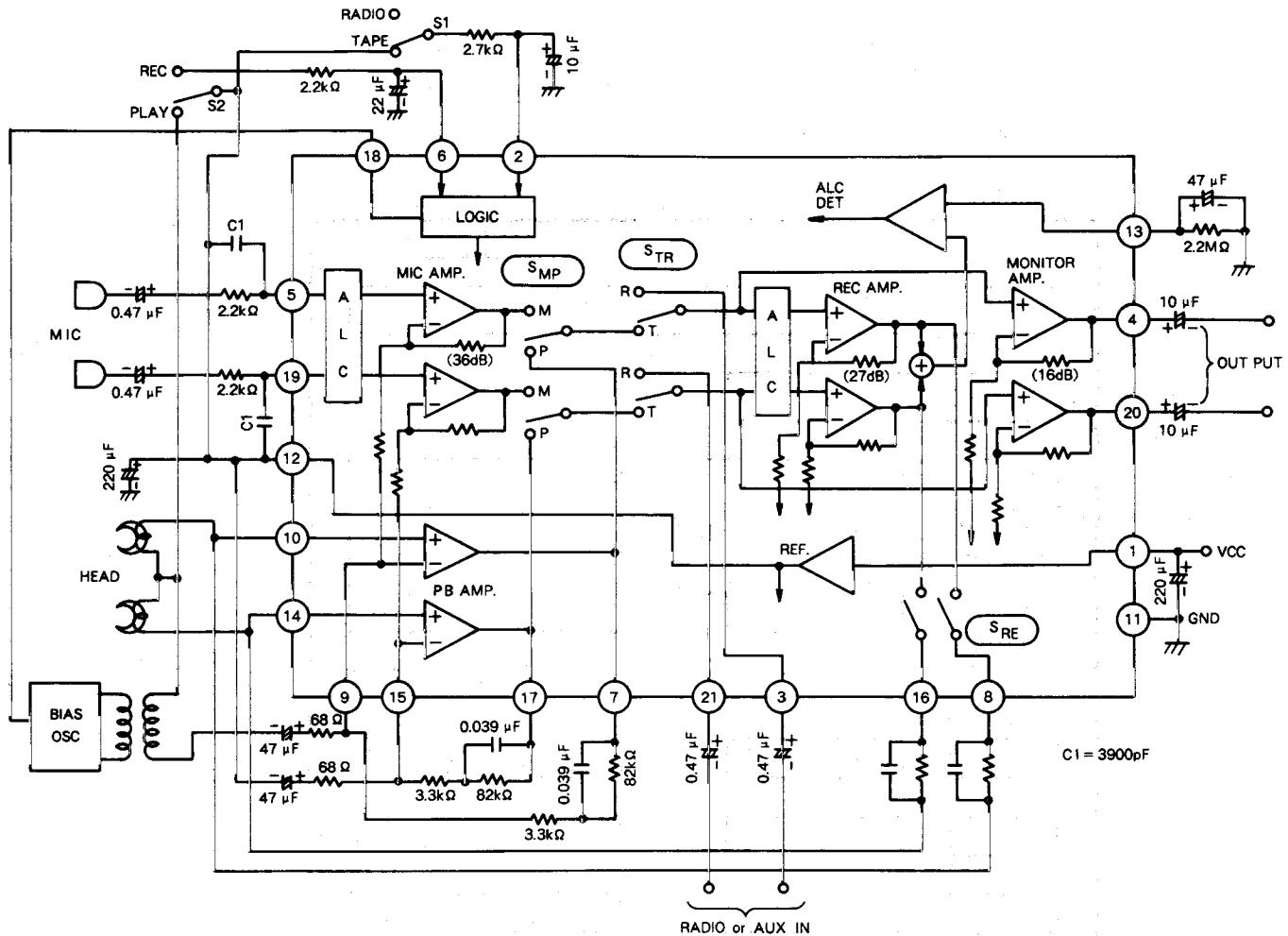


Fig. 11-5

● IC371: BA15218N

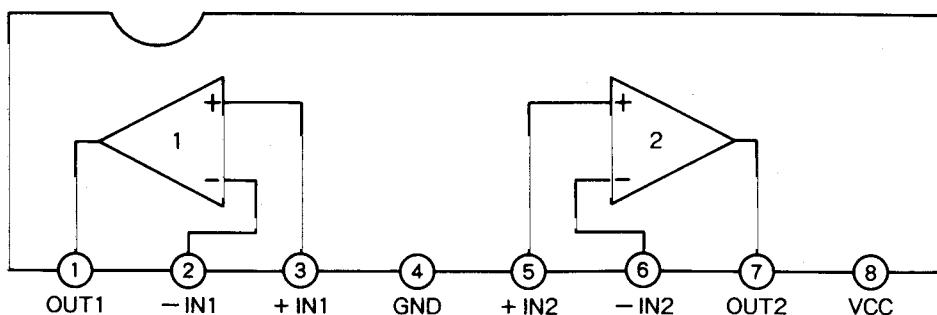


Fig. 11-6

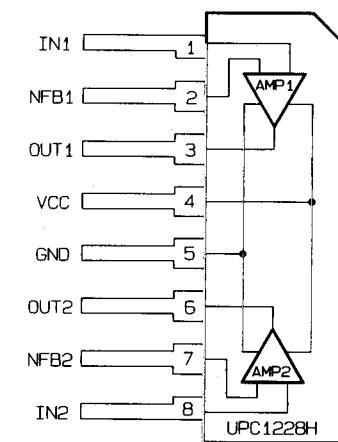


Fig. 11-7

■ IC701: MN150804

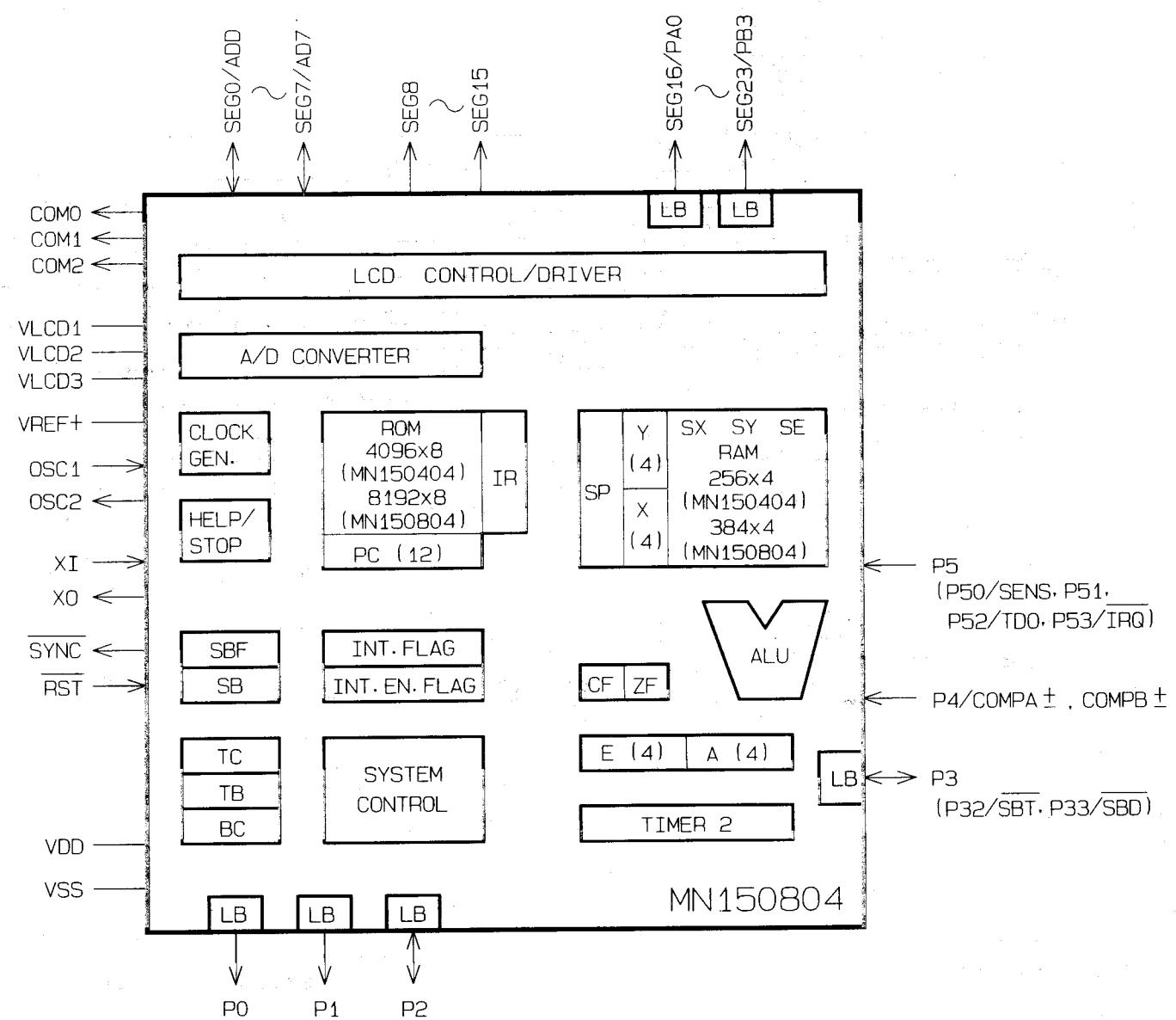


Fig. 11-8

12. Standard Schematic Diagram

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■ Pre-amplifier & Power Amplifier Circuit: Drawing No. FMDH7004-006AW

A

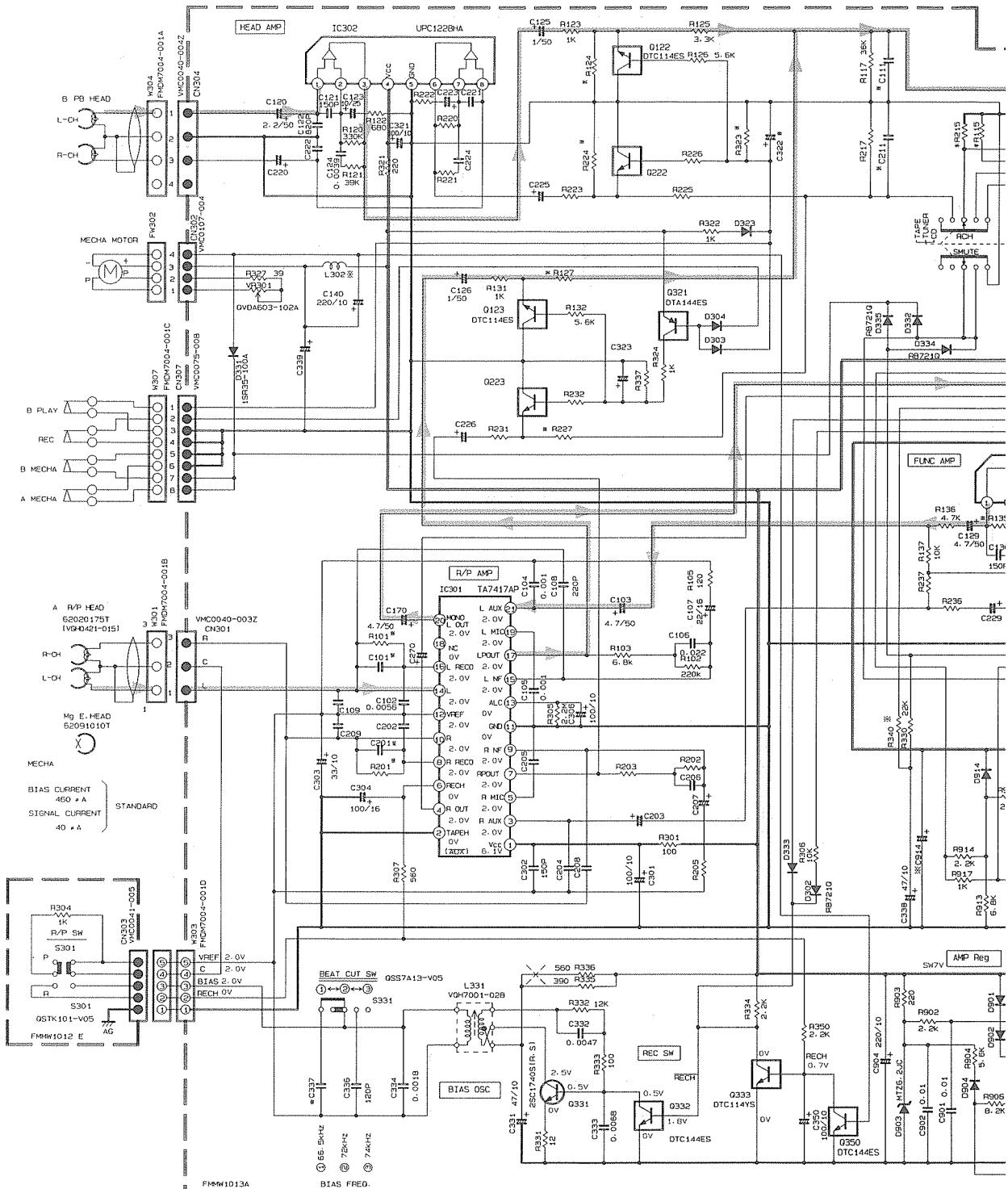
B

C

D

E

F



* MARK REF. NO PARTS

LOCATION	I-17	D-17	B-11	D-4	B-15	C-14	D-13	G-5	G-5	D-6	F-11	B-10	J-15	I-16	H-15	H-15	
VR362	Q121-Q221	R115-R215	R111-R211	R113/R213	R114/R214	R112/R212	C101-C201	R101-R201	R127-R227	R135/R235	C111-C211	C105-C205	C103-C203	R106-R206	C109-C209		
E/EN/B/G/C1/VX	QVDB17A-V02	50K A	DTC114TS	5.6K	6.8K	22K	1.2K	5.6K	0.001	10K	220P	1000P	0.22	100	220P		
J/C	QVDB17A-V02	50K A	DTC114TS	2.2K	6.2K	22K	1.2K	5.6K	0.001	10K	220P	560P	0.1	-	-	-	
U/UT/A	QVDB17B-V02	50K B	2SC20011L-K1	1K	B143/B144	22K	1.2K	5.6K	0.001	20K	3.5K	13K	330P	560P	0.1	-	-

Fig. 12-1

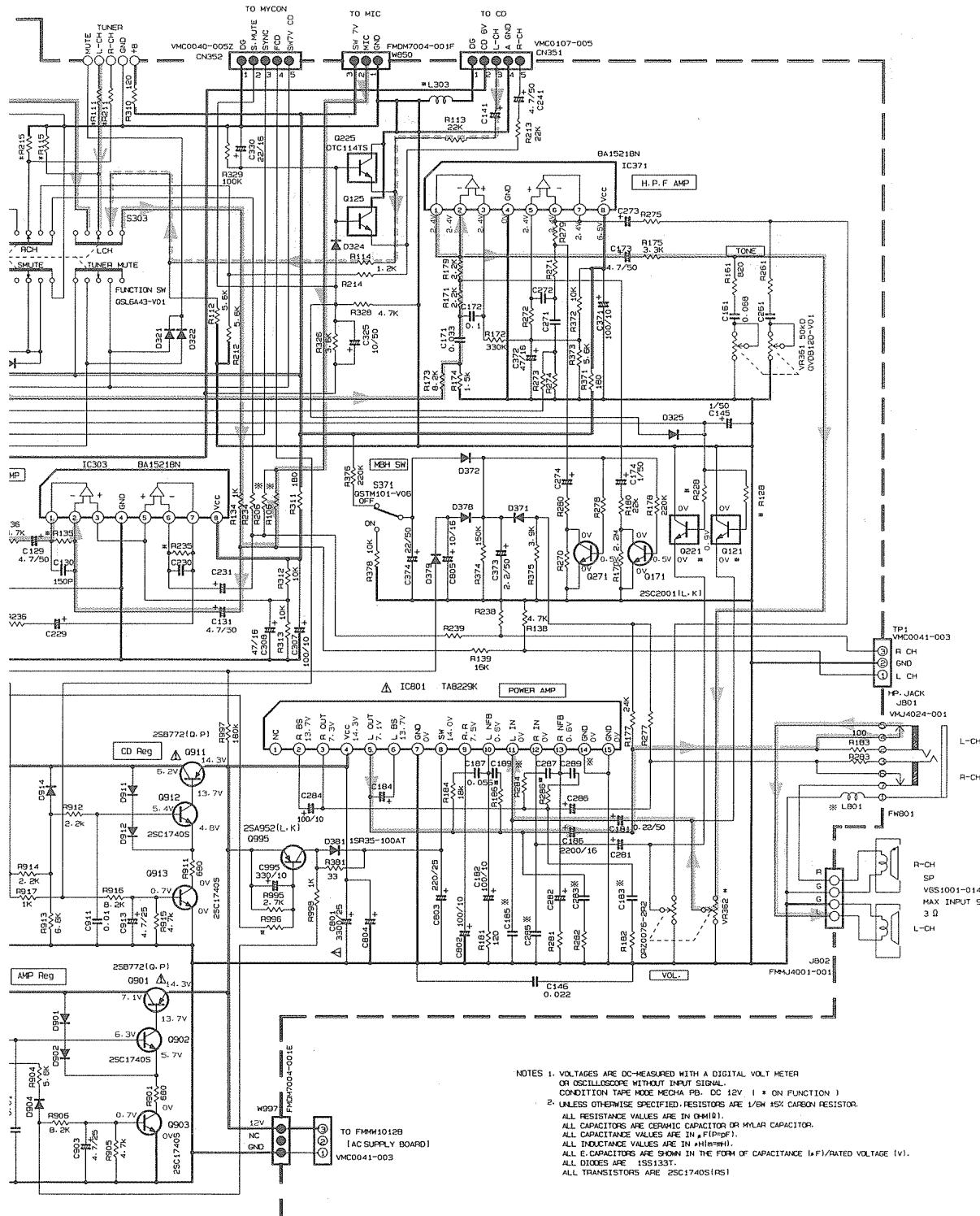
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H-15	B-15	F-13	I-10	L-4	H-19	F-13	O-5
286 C169-C286	L303	L302	C914	C337	L801	R106/R206	R12B/R228
220P B145	VOP002B-100Z	-	470P	VOP001B-100Y	-	10	
- B146	B145	-	-	-	-	10	
- B146	B145	-	-	-	3.9K	10K	

LOCATION	H-7	K-8
E/EN/B/G/GI/VX	R340	R996
J/C	5.6K	1.8K
U/UT/A	B149	2.0K

Tape Playback Signal
 CD Analogue Signal
 FM Radio Signal
 MIC Signal
 +B Line

■ Tuner Circuit: Drawing No. FMDH7004-005TW
(PC - X75BK B/E/EN/G)

1 2 3 4 5

A

B

C

D

E

F

+B Line
FM Radio signal
MW Radio signal
LW Radio signal

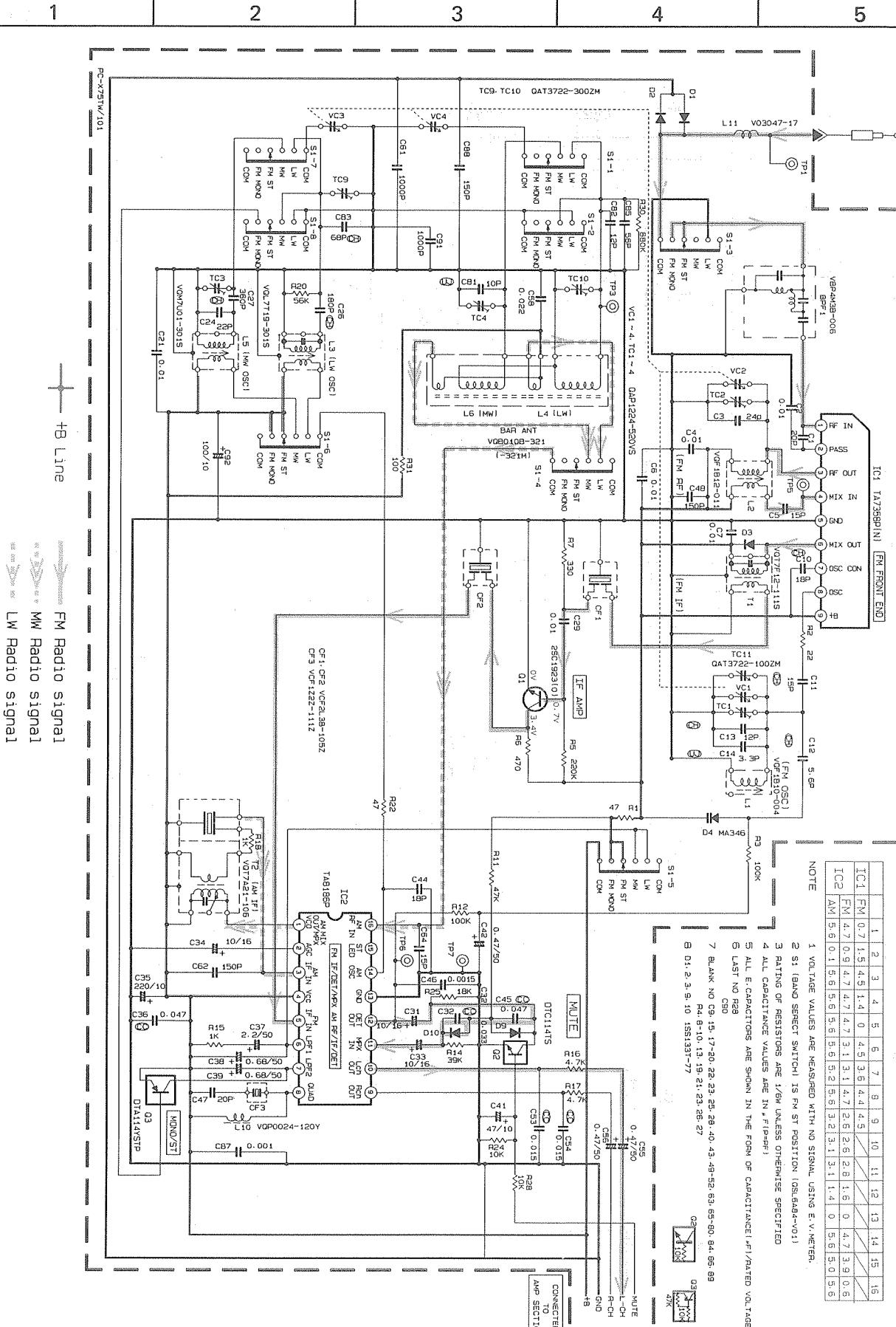


Fig. 12-2

■ Tuner Circuit: Drawing No. FMDH7004-015TW
(PC - X75BK GI)

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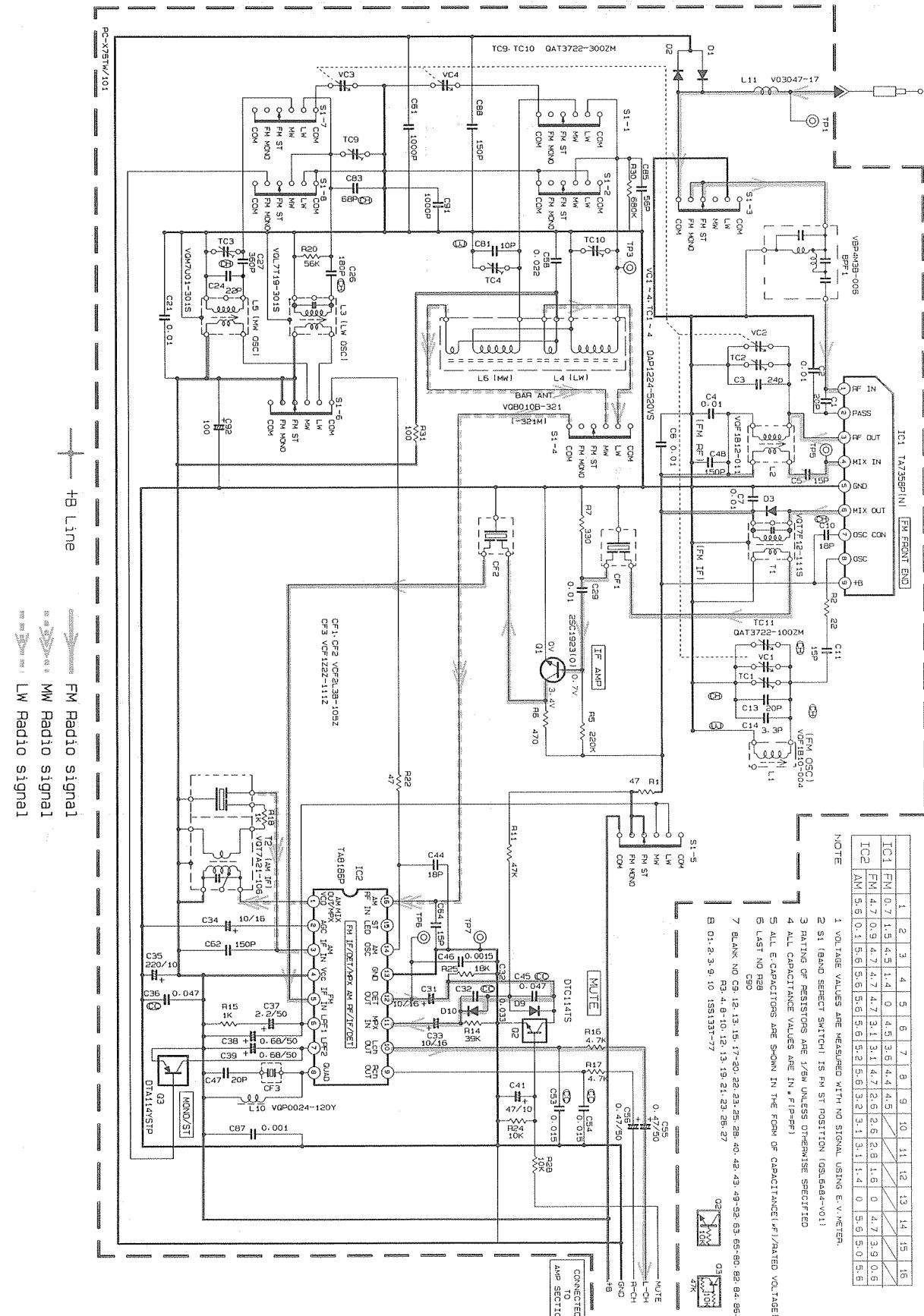


Fig. 12-3

■ Tuner Circuit: Drawing No. FMDH7004-012TW
(PC-X75BK VX)

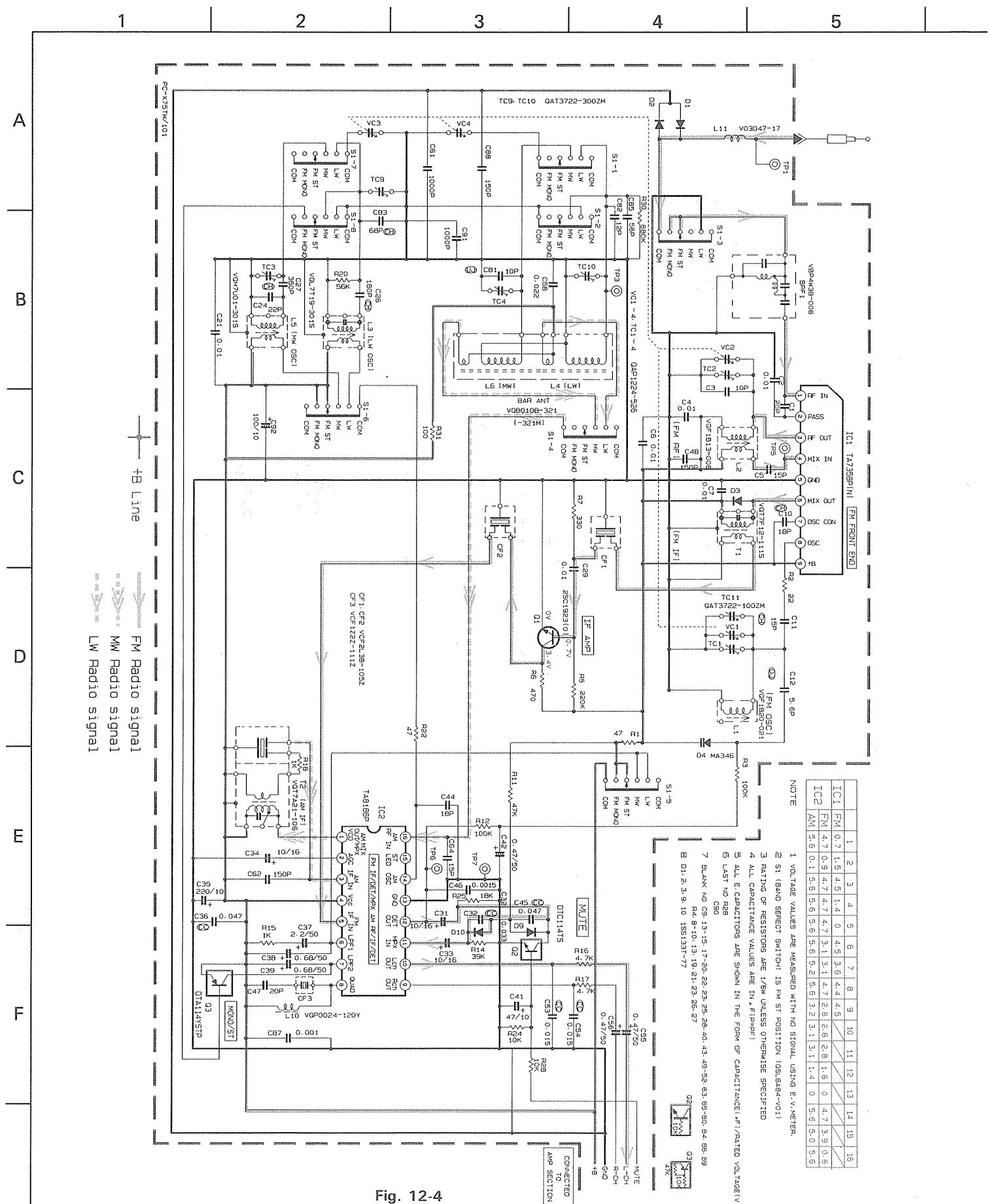


Fig. 12-4

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■ LCD & Microcomputer/Mic Circuit: Drawing No. FMDH7004-006SW

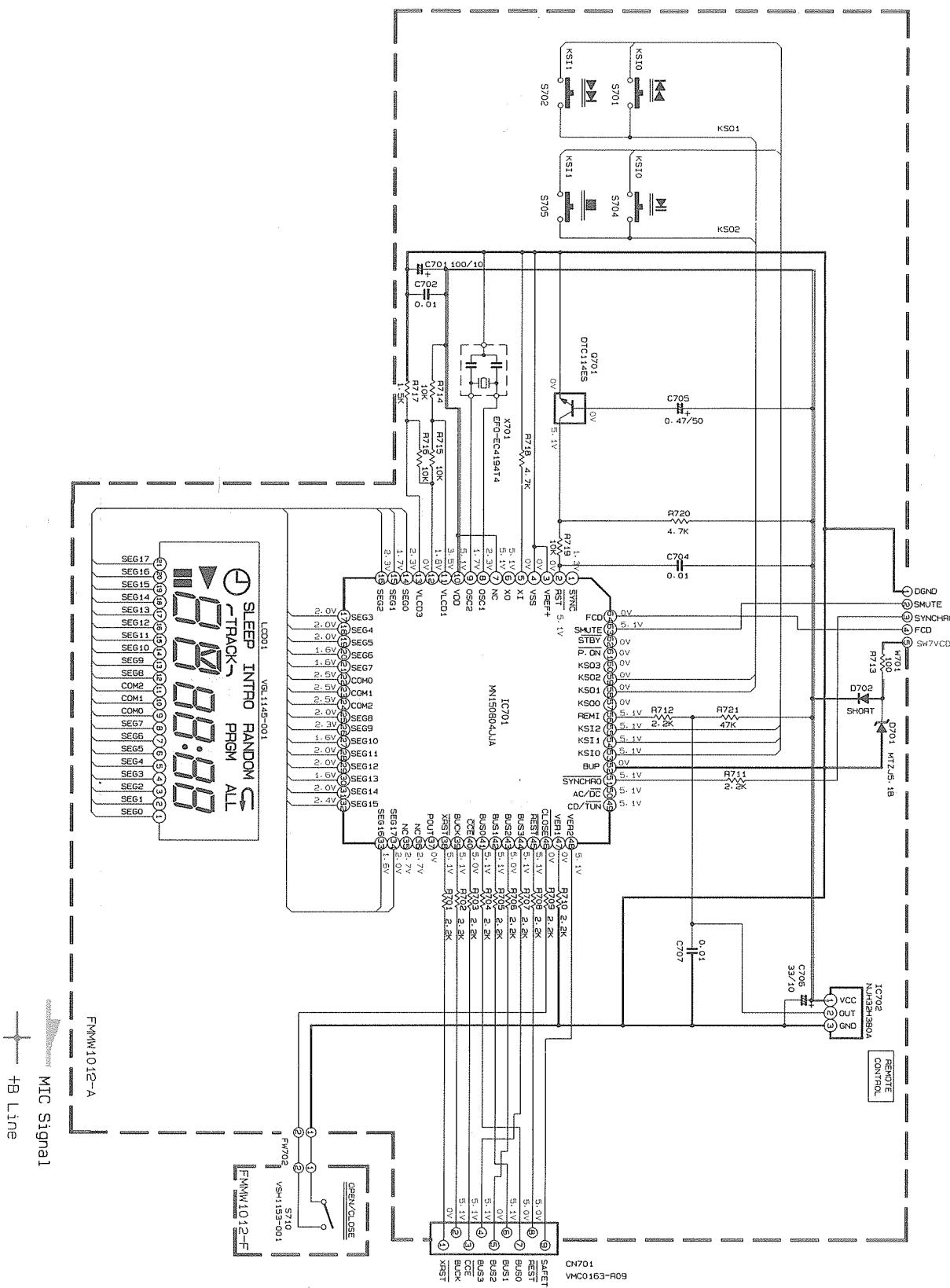


Fig. 12-5

1

2

3

4

5

CD Amplifier Circuit:
Drawing No. FMDH7004-
001CV

A

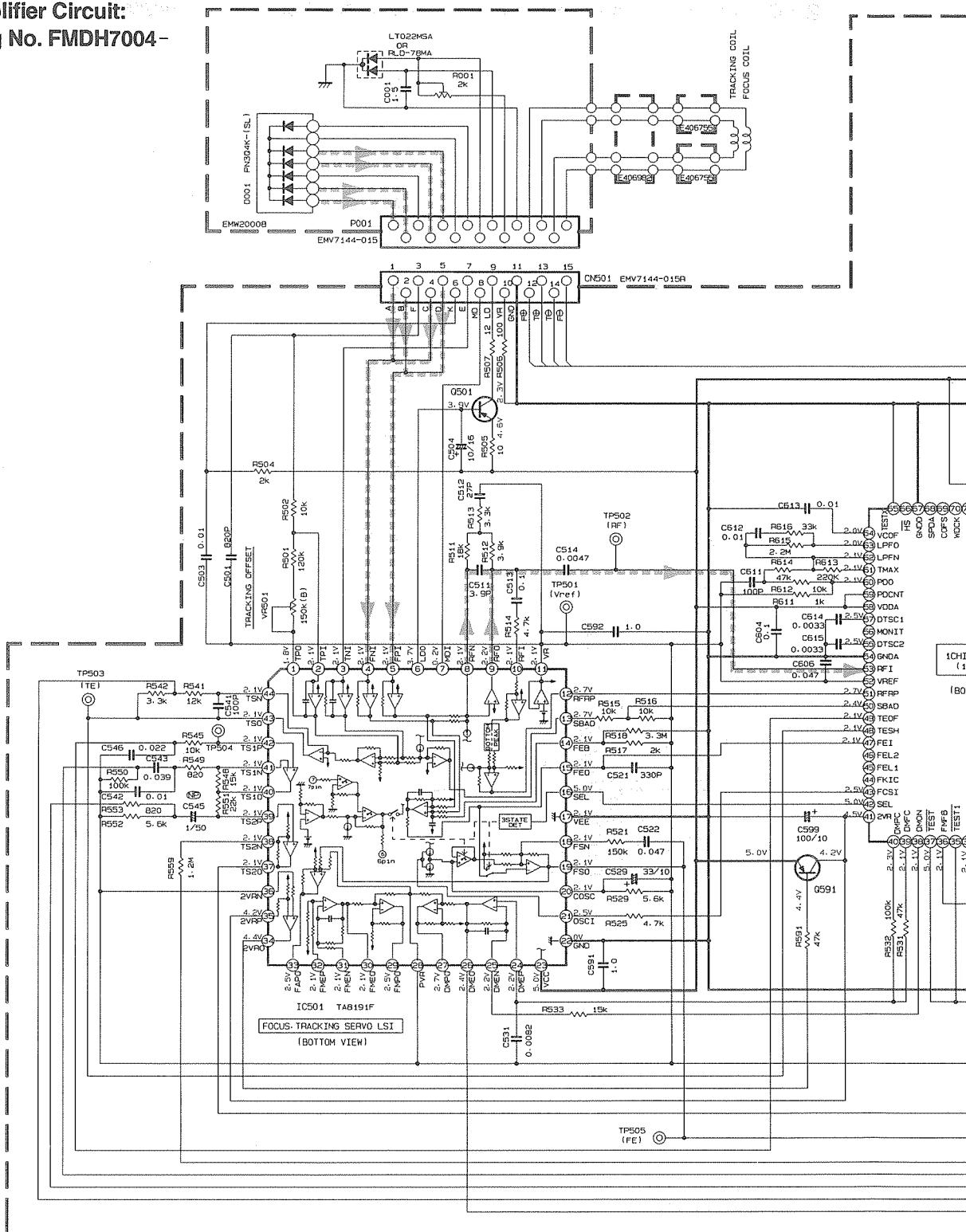
B

C

D

E

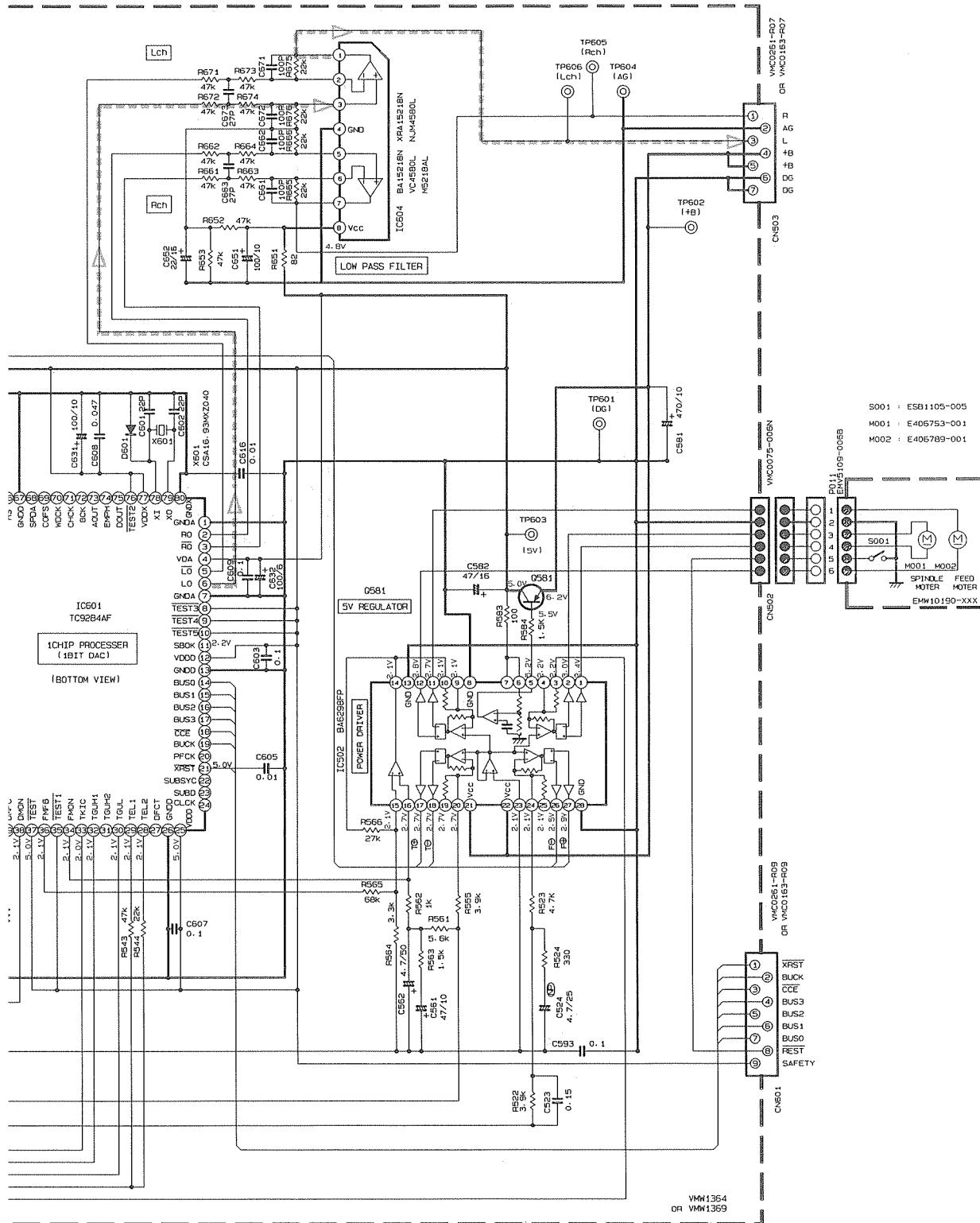
F



NOTES
 1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER IN PLAYBACK.
 2. UNLESS OTHERWISE SPECIFIED, RESISTORS ARE 1/4W ±5% CARBON RESISTOR.
 ALL RESISTANCE VALUES ARE IN OHM (Ω).
 ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
 ALL CAPACITANCE VALUES ARE IN μ F (μF).
 ALL INDUCTANCE VALUES ARE IN μ H (μH).
 ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (A.F) / RATED VOLTAGE (V).
 (1) UNFLAMMABLE CARBON RESISTOR
 (2) METAL FILM RESISTOR
 (3) OXIDE METAL FILM RESISTOR
 (4) 120V LOW LEAK CURRENT ELECTROLYTIC CAPACITOR
 (5) 50V-100V ARTESIAN ELECTROLYTIC CAPACITOR
 (6) POLYPROPYLENE CAPACITOR
 (7) POLYSTYRENE CAPACITOR

Q501	2SA952(L-K1)
Q591	2SA1309(R-S1) OR 2SA1175(HFE1) OR 2SA933S(RS)
D501	MA700A OR R8210
D691	MA165 OR HSS1041J OR 1SS254T-77

Fig. 12-6



CD Analogue Signal

*** CD Digital Signal

—+B Line

1 2 3 4 5

■ Power Supply Circuit

(PC - X75BK B)

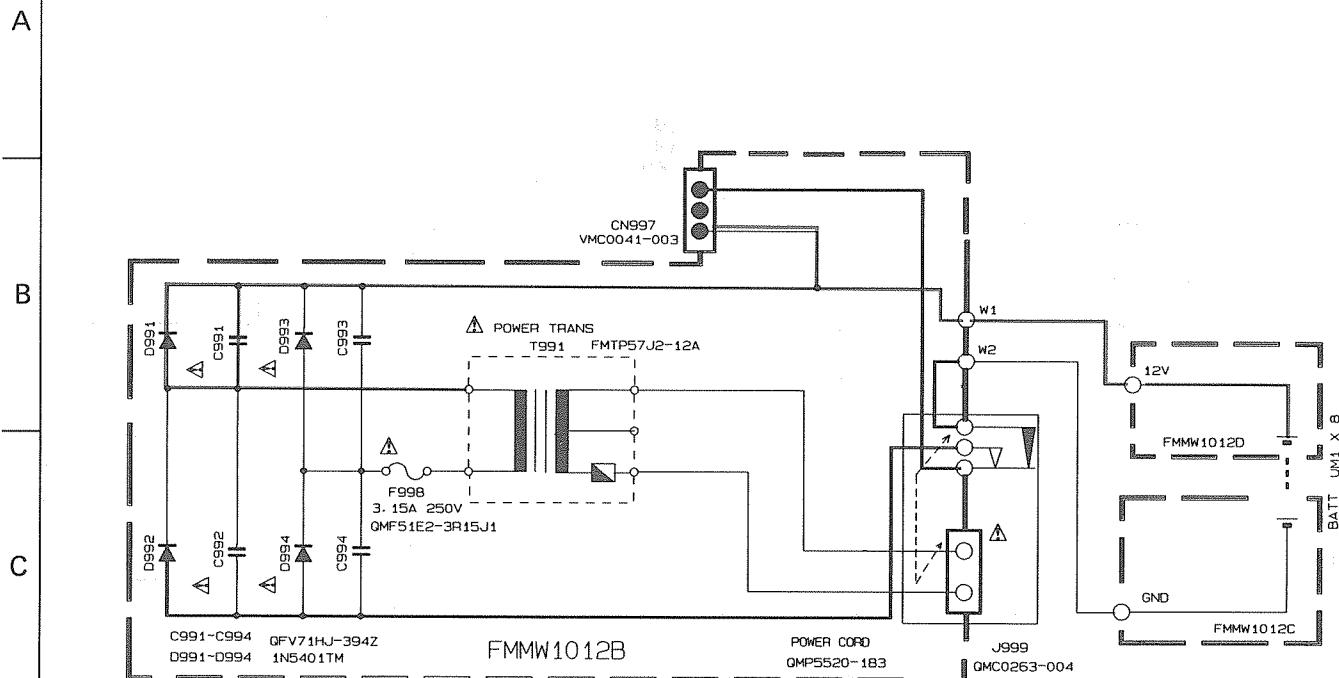
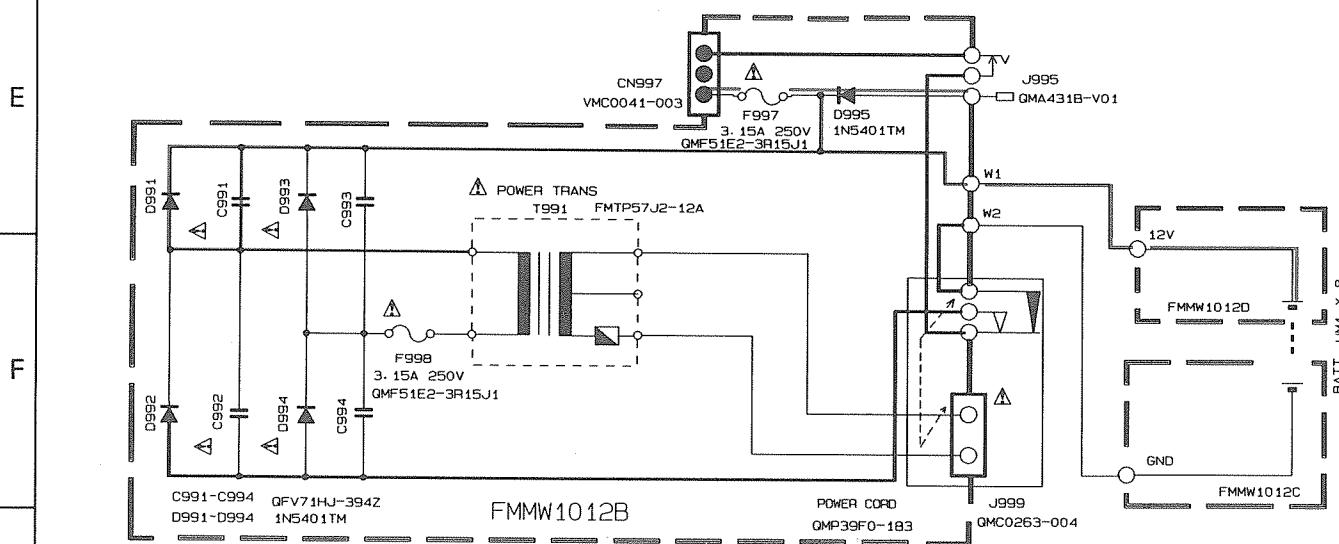


Fig. 12-7

(PC - X75BK E/EN)



+B Line

Fig. 12-8

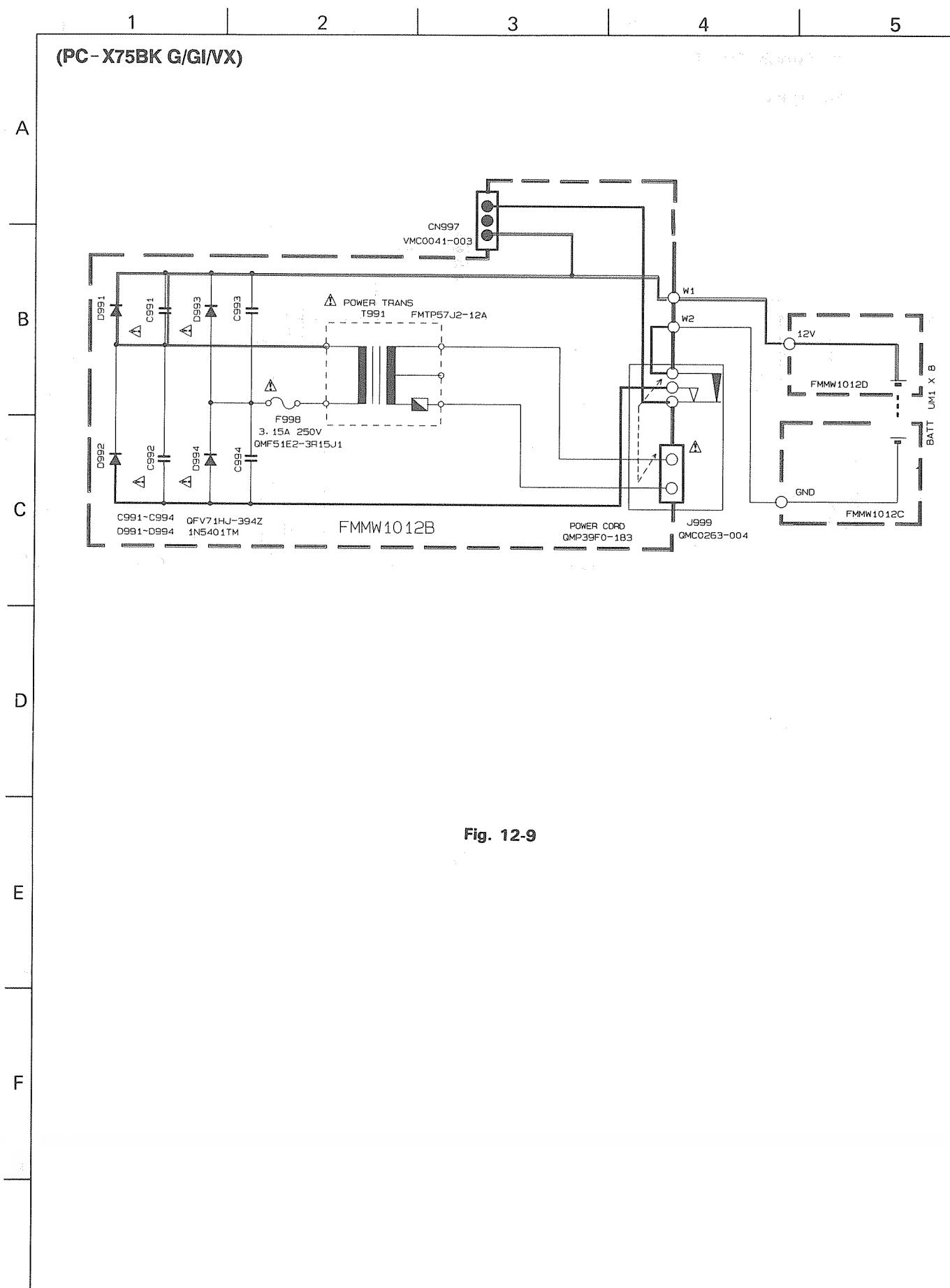
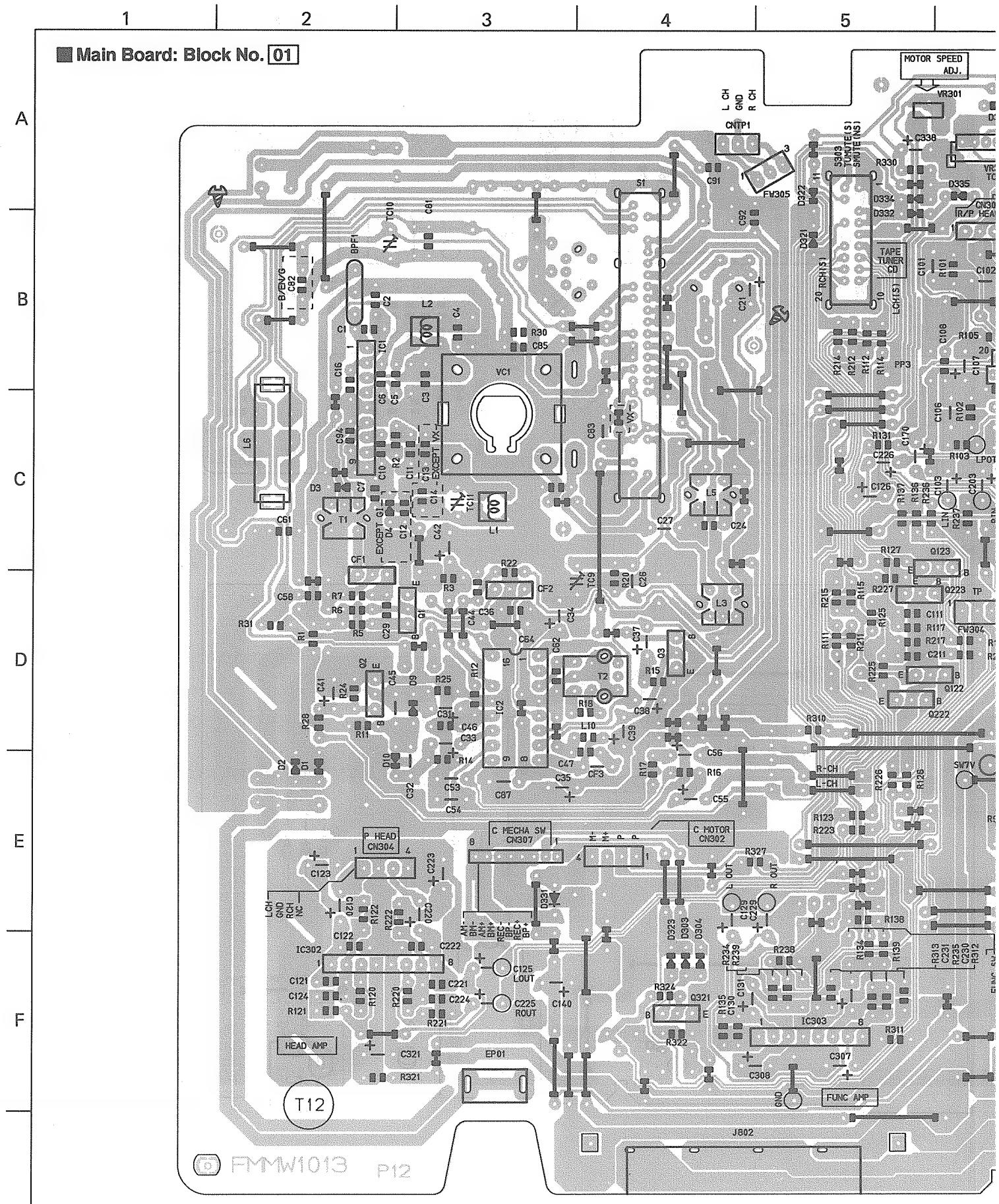


Fig. 12-9

13. Location of P. C. Board Parts



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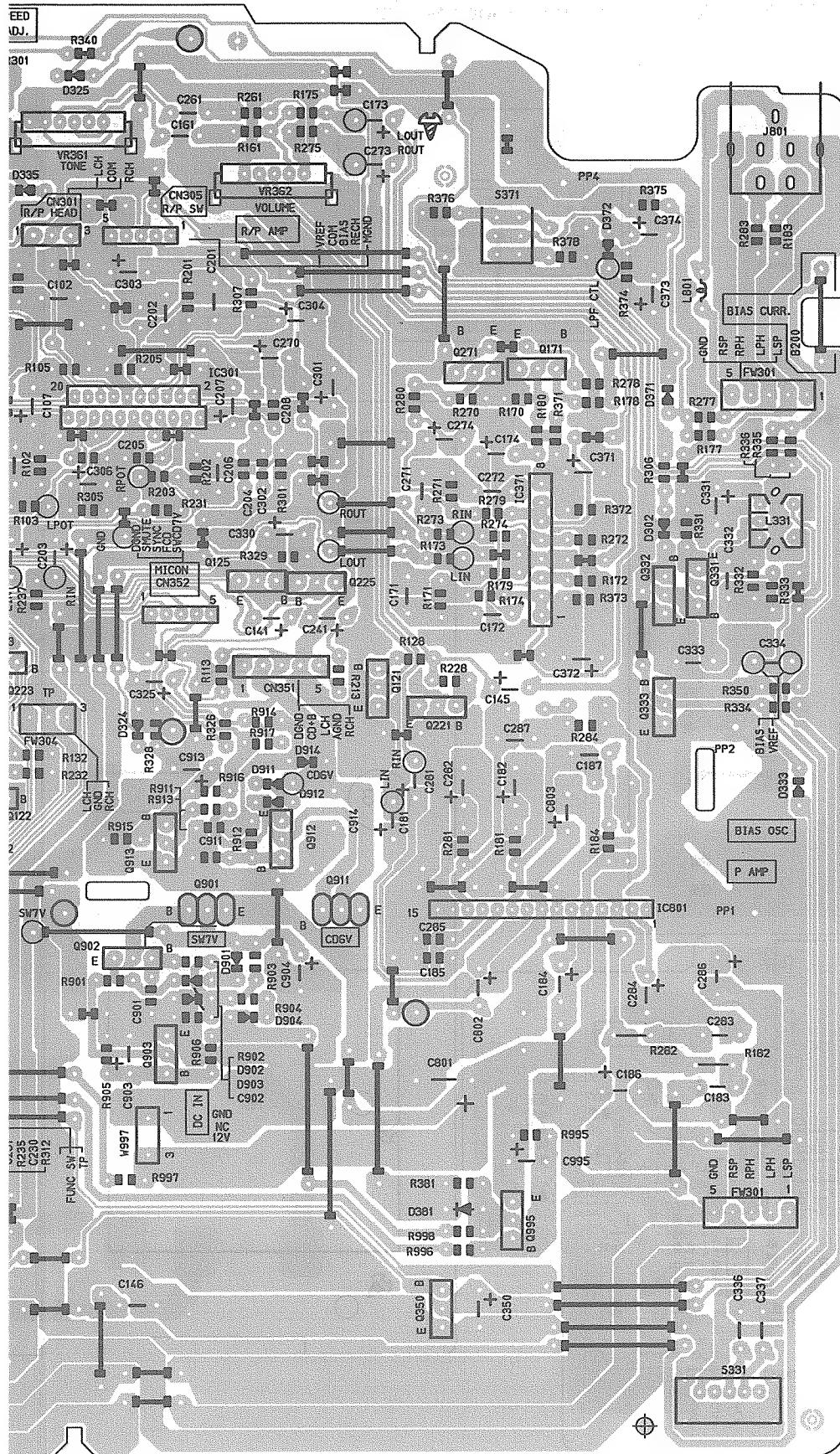
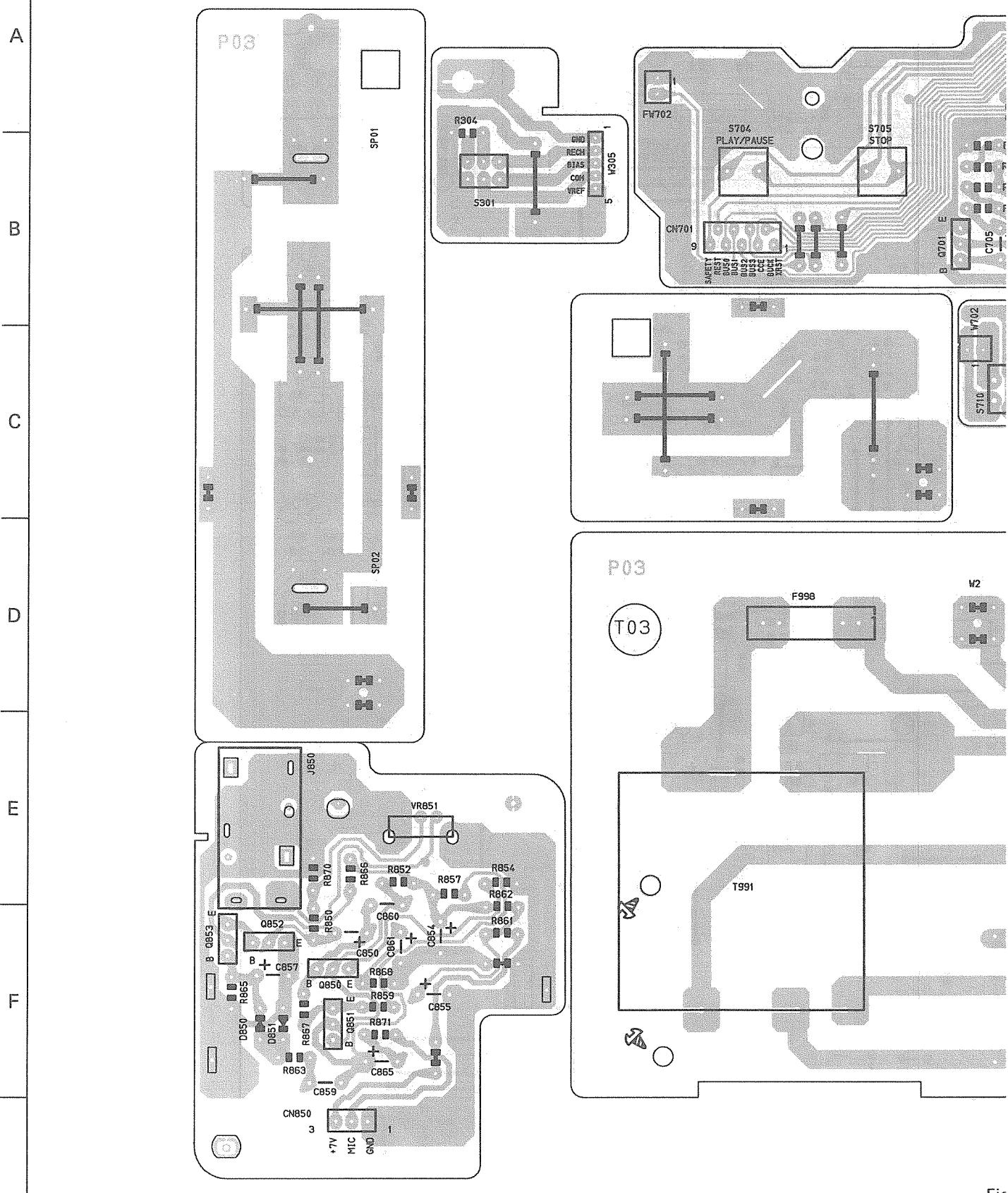


Fig. 13-1

1 2 3 4 5

■ Power Supply/LCD & CD Operation Switch board: Block No. 02



Fig

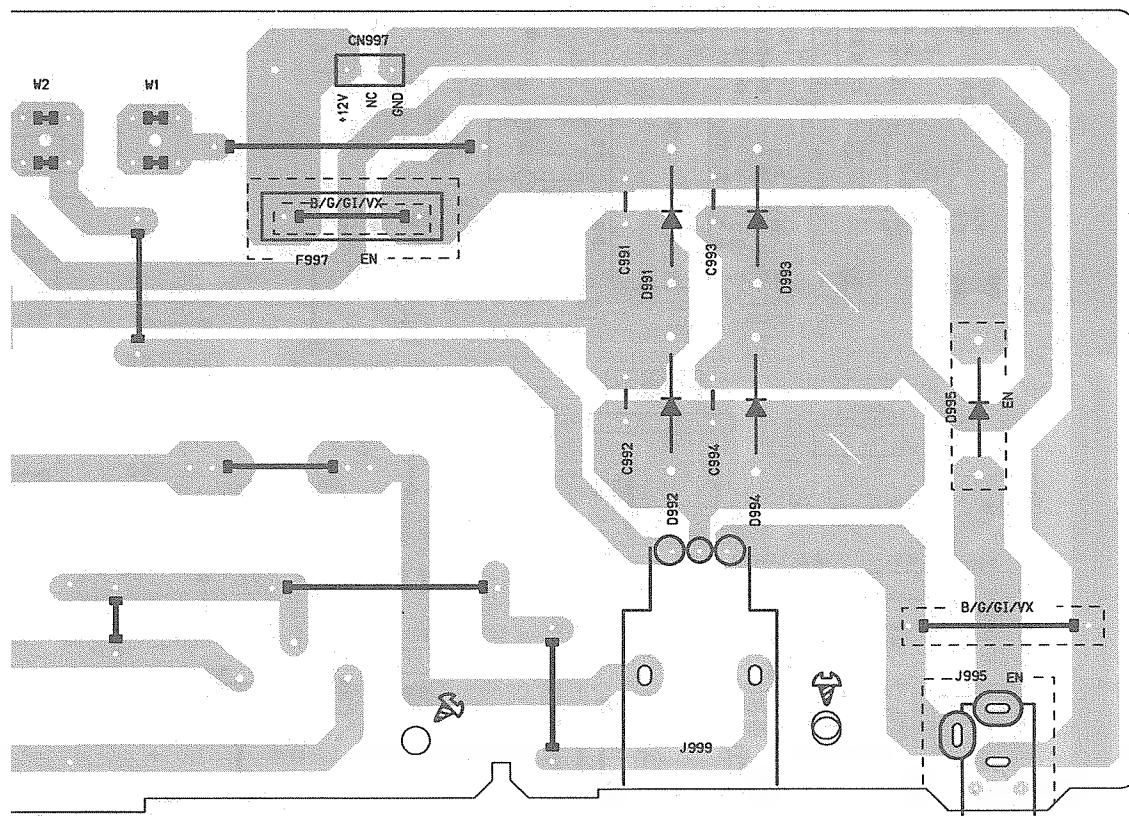
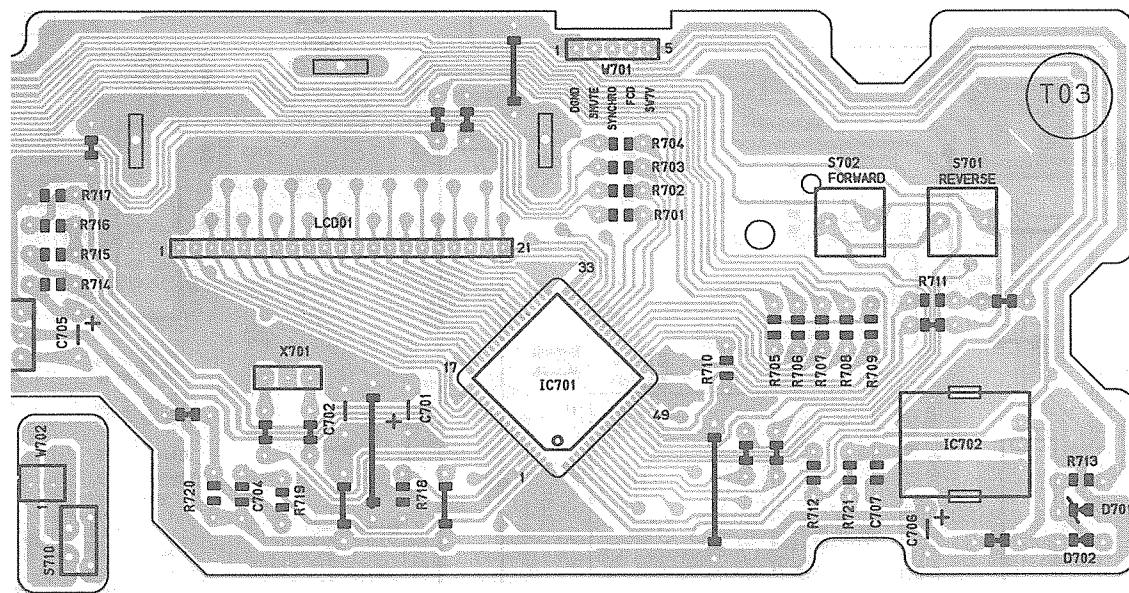
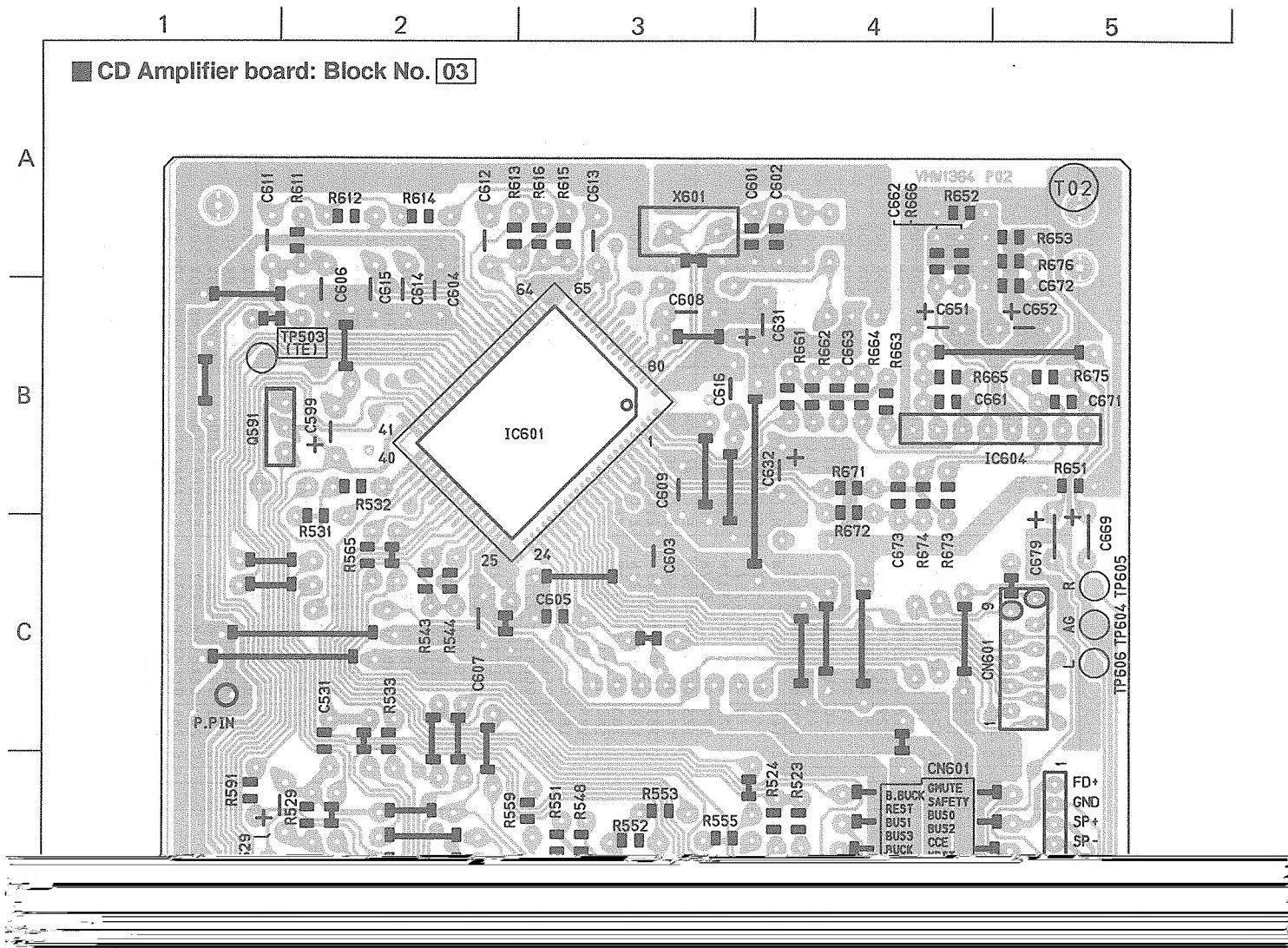


Fig. 13-2



14. Electrical Parts List

Main Board

BLOCK NO. 011111

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX	BLOCK NO. 011111
BP1 1	VBP4M3B-005	BP FILTER			
C 1	QCSB1HK-200Y	C.CAPACITOR	20PF 5% 50V	C.CAPACITOR	C 108 QCBB1HK-221Y
C 2	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	C.CAPACITOR	C 111 QCBB1HK-221Y
C 3	QCS11HJ-240	C.CAPACITOR	24PF 5% 50V	C.CAPACITOR	C 120 QETC1HM-225Z
C 4	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	C.CAPACITOR	C 121 QCBB1HK-151Y
C 5	QCSB1HK-150Y	C.CAPACITOR	.010MF 30% 50V	C.CAPACITOR	C 122 QCBB1HK-821Y
C 6	QCVB1CN-103Y	C.CAPACITOR	15PF 5% 50V	C.CAPACITOR	C 123 QETC1EM-106Z
C 7	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	C.CAPACITOR	C 124 QCXB1CM-392Y
C 8	QCT30CH-180Y	C.CAPACITOR	18PF 5% 50V	C.CAPACITOR	C 125 QETC1HM-105Z
C 9	QCT30CH-150Y	C.CAPACITOR	15PF 5% 50V	C.CAPACITOR	C 126 QETC1HM-105Z
C 10	QCT30CH-586Y	C.CAPACITOR	5.6PF 5% 50V	C.CAPACITOR	C 127 QETC1HM-475Z
C 11	QCT30CH-120Y	C.CAPACITOR	1.2PF 5% 50V	C.CAPACITOR	C 128 QETC1HM-151Y
C 12	QCT30CH-120Y	C.CAPACITOR	1.2PF 5% 50V	C.CAPACITOR	C 129 QETC1HM-475Z
C 13	QCT30UJ-3R3Y	C.CAPACITOR	3.3PF 5% 50V	C.CAPACITOR	C 130 QETC1HM-475Z
C 14	QCT30UJ-3R3Y	C.CAPACITOR	1.000PF 10% 50V	C.CAPACITOR	C 131 QETC1HM-475Z
C 15	QCBB1HK-102Y	C.CAPACITOR	1.000PF 10% 50V	C.CAPACITOR	C 132 QETC1HM-475Z
C 16	QETC1AM-107Z	E.CAPACITOR	100MF 20% 10V	E.CAPACITOR	C 140 QETN1AM-108Z
C 17	QCS21H-361Z	C.CAPACITOR	3.60PF 5% 50V	C.CAPACITOR	C 141 QEK1HM-475Z
C 18	QCS21H-181Z	C.CAPACITOR	1.80PF 5% 50V	C.CAPACITOR	C 145 QETC1HM-105Z
C 19	QCS21H-361Z	C.CAPACITOR	3.60PF 5% 50V	C.CAPACITOR	C 146 QFLC1HJ-223Z
C 20	QCS21H-181Z	C.CAPACITOR	1.80PF 5% 50V	C.CAPACITOR	C 161 QCC31EM-683Z
C 21	QETC1AM-107Z	E.CAPACITOR	100MF 20% 10V	E.CAPACITOR	C 170 QETC1HM-475Z
C 22	QCT25CH-220Y	C.CAPACITOR	22PF 5% 50V	C.CAPACITOR	C 171 QFLC1HJ-333Z
C 23	QETC1AM-107Z	E.CAPACITOR	100MF 20% 10V	E.CAPACITOR	C 172 QFV41HJ-104Z
C 24	QETC1AM-107Z	E.CAPACITOR	1.03MF 20% 25V	E.CAPACITOR	C 173 QETC1HM-475Z
C 25	QETC1AM-106Z	E.CAPACITOR	1.0MF 20% 16V	E.CAPACITOR	C 174 QETC1HM-105Z
C 26	QETC1AM-106Z	E.CAPACITOR	1.0MF 20% 16V	E.CAPACITOR	C 181 QETC1HM-242
C 27	QETC1AM-106Z	E.CAPACITOR	220MF 20% 10V	E.CAPACITOR	C 182 QETC1AM-107Z
C 28	QETC1AM-106Z	E.CAPACITOR	1000PF 10% 50V	E.CAPACITOR	C 183 QFV41HJ-224Z
C 29	QETC1AM-106Z	E.CAPACITOR	2.2MF 20% 50V	E.CAPACITOR	C 184 QETC1AM-107Z
C 30	QETC1AM-106Z	E.CAPACITOR	.68MF 20% 50V	E.CAPACITOR	C 185 QCBB1HK-102Y
C 31	QETC1AM-106Z	E.CAPACITOR	.68MF 20% 50V	E.CAPACITOR	C 186 QETM1CM-228
C 32	QETC1EM-333Z	V	1.0MF 20% 16V	V	C 187 QFLB1HK-563
C 33	QETC1CM-106Z	E.CAPACITOR	.033MF 20% 25V	E.CAPACITOR	C 189 QETC1HM-105Z
C 34	QEK61CM-106Z	E.CAPACITOR	1.0MF 20% 16V	E.CAPACITOR	C 190 QETC1HM-242
C 35	QETC1AM-227Z	E.CAPACITOR	220MF 20% 10V	E.CAPACITOR	C 192 QETC1AM-107Z
C 36	QCBB1HK-102Y	C.CAPACITOR	1000PF 10% 50V	C.CAPACITOR	C 193 QFV41HJ-224Z
C 37	QETC1HM-225Z	E.CAPACITOR	2.2MF 20% 50V	E.CAPACITOR	C 194 QETC1AM-107Z
C 38	QETC1HM-684Z	E.CAPACITOR	.68MF 20% 50V	E.CAPACITOR	C 195 QCBB1HK-102Y
C 39	QETC1HM-684Z	E.CAPACITOR	.68MF 20% 50V	E.CAPACITOR	C 196 QETM1CM-228
C 40	QETC1HM-684Z	E.CAPACITOR	4.7MF 20% 10V	E.CAPACITOR	C 189 QETC1HM-105Z
C 41	QETC1AM-470Z	E.CAPACITOR	.47MF 20% 50V	E.CAPACITOR	C 197 QFLB1HK-563
C 42	QETC1AM-470Z	E.CAPACITOR	.47MF 20% 50V	E.CAPACITOR	C 198 QETC1HM-105Z
C 43	QCSB1HJ-180Y	C.CAPACITOR	18PF 5% 50V	C.CAPACITOR	C 201 QFLB1HK-102
C 44	QCSB1HJ-180Y	C.CAPACITOR	.047MF 20% 25V	C.CAPACITOR	C 202 QFLC1HJ-562Z
C 45	QCC11EM-473V	C.CAPACITOR	1500PF 20% 16V	C.CAPACITOR	C 203 QETC1HM-475Z
C 46	QCCB1CM-152Y	C.CAPACITOR	20PF 5% 50V	C.CAPACITOR	C 205 QCBB1HK-102Y
C 47	QCSB1HJ-200Y	C.CAPACITOR	1000PF 10% 50V	C.CAPACITOR	C 206 QFLC1HJ-223Z
C 48	QCC11EM-153V	C.CAPACITOR	.015MF 20% 25V	C.CAPACITOR	C 207 QETC1HM-226Z
C 49	QCC11EM-153V	C.CAPACITOR	.015MF 20% 50V	C.CAPACITOR	C 208 QETC1HM-221Y
C 50	QETC1HM-474Z	E.CAPACITOR	.47MF 20% 50V	E.CAPACITOR	C 211 QETC1HM-221Y
C 51	QETC1HM-474Z	E.CAPACITOR	.47MF 20% 50V	E.CAPACITOR	C 220 QETC1HM-475Z
C 52	QCCB1CM-152Y	C.CAPACITOR	.022MF +80:-20%	C.CAPACITOR	C 221 QETC1HM-105Z
C 53	QCC11EM-153V	C.CAPACITOR	.015MF 20% 25V	C.CAPACITOR	C 222 QETC1HM-475Z
C 54	QCC11EM-153V	C.CAPACITOR	150PF 10% 50V	C.CAPACITOR	C 223 QETC1EM-106Z
C 55	QETC1HM-474Z	E.CAPACITOR	.47MF 20% 50V	E.CAPACITOR	C 224 QETC1EM-392Y
C 56	QETC1HM-474Z	E.CAPACITOR	.47MF 20% 50V	E.CAPACITOR	C 225 QETC1HM-105Z
C 57	QCCB1HJ-223	C.CAPACITOR	6.8PF 5% 50V	C.CAPACITOR	C 226 GETC1HM-105Z
C 58	QCCB1HJ-223	C.CAPACITOR	.56PF 5% 50V	C.CAPACITOR	C 227 QETC1HM-475Z
C 59	QCCB1HK-102Y	C.CAPACITOR	1.000PF 10% 50V	C.CAPACITOR	C 228 QETC1HM-105Z
C 60	QCCB1HK-102Y	C.CAPACITOR	.047MF 20% 25V	C.CAPACITOR	C 229 QETC1HM-475Z
C 61	QCCB1HK-102Y	C.CAPACITOR	1.000PF 10% 50V	C.CAPACITOR	C 230 QETC1HM-151Y
C 62	QCCB1HK-151Y	C.CAPACITOR	1.0PF 5% 50V	C.CAPACITOR	C 231 QETC1HM-475Z
C 63	QCS11HJ-100	C.CAPACITOR	12PF 5% 50V	C.CAPACITOR	C 241 QEK1HM-475Z
C 64	QCSB1HJ-120Y	C.CAPACITOR	6.8PF 5% 50V	C.CAPACITOR	C 261 QCC31EM-683Z
C 65	QCCB1HK-580Z	C.CAPACITOR	.56PF 5% 50V	C.CAPACITOR	C 262 QETC1HM-475Z
C 66	QCCB1HK-580Y	C.CAPACITOR	1.000PF 10% 50V	C.CAPACITOR	C 263 QETC1HM-475Z
C 67	QCC11EM-473V	C.CAPACITOR	.047MF 20% 25V	C.CAPACITOR	C 264 QETC1HM-475Z
C 68	QCCB1HK-102Y	C.CAPACITOR	1.000PF 10% 50V	C.CAPACITOR	C 265 QETC1HM-475Z
C 69	QCCB1HK-102Y	C.CAPACITOR	1.000PF 10% 50V	C.CAPACITOR	C 266 QETC1HM-475Z
C 70	QCCB1HK-102Y	C.CAPACITOR	1.000PF 10% 50V	C.CAPACITOR	C 267 QER61HM-475Z
C 71	QCCB1HK-102Y	C.CAPACITOR	4.7MF 20% 50V	C.CAPACITOR	C 268 QETC1HM-105Z
C 72	QCCB1HK-102Y	C.CAPACITOR	1.000PF 10% 50V	C.CAPACITOR	C 269 QETC1HM-475Z
C 73	QCCB1HK-102Y	C.CAPACITOR	1.000PF 10% 50V	C.CAPACITOR	C 270 QETC1HM-475Z
C 74	QCCB1HK-102Y	C.CAPACITOR	1.000PF 10% 50V	C.CAPACITOR	C 271 QFLC1HJ-333Z
C 75	QCCB1HK-102Y	C.CAPACITOR	1.000PF 10% 50V	C.CAPACITOR	C 272 QFV41HJ-104Z
C 76	QCCB1HK-102Y	C.CAPACITOR	1.000PF 10% 50V	C.CAPACITOR	C 273 QER61HM-475Z
C 77	QCCB1HK-102Y	C.CAPACITOR	2.2MF 20% 16V	C.CAPACITOR	C 274 QETC1HM-105Z

BLOCK NO. 011111

REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX	BLOCK NO. 011111
BP1 1	VBP4M3B-005	BP FILTER			
C 1	QCSB1HK-200Y	C.CAPACITOR	20PF 5% 50V	C.CAPACITOR	C 108 QCBB1HK-221Y
C 2	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	C.CAPACITOR	C 111 QCBB1HK-221Y
C 3	QCS11HJ-240	C.CAPACITOR	24PF 5% 50V	C.CAPACITOR	C 120 QETC1HM-225Z
C 4	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	C.CAPACITOR	C 121 QCBB1HK-151Y
C 5	QCSB1HK-150Y	C.CAPACITOR	.010MF 30% 50V	C.CAPACITOR	C 122 QCBB1HK-821Y
C 6	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	C.CAPACITOR	C 123 QETC1EM-106Z
C 7	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V	C.CAPACITOR	C 124 QETC1HM-105Z
C 8	QCT30CH-180Y	C.CAPACITOR	18PF 5% 50V	C.CAPACITOR	C 126 QETC1HM-105Z
C 9	QCT30CH-150Y	C.CAPACITOR	15PF 5% 50V	C.CAPACITOR	C 127 QETC1HM-475Z
C 10	QCT30CH-586Y	C.CAPACITOR	5.6PF 5% 50V	C.CAPACITOR	C 128 QETC1HM-475Z
C 11	QCT30CH-120Y	C.CAPACITOR	1.2PF 5% 50V	C.CAPACITOR	C 130 QETC1HM-475Z
C 12	QCT30UJ-3R3Y	C.CAPACITOR	3.3PF 5% 50V	C.CAPACITOR	C 131 QETC1HM-475Z
C 13	QCT30UJ-3R3Y	C.CAPACITOR	1.000PF 10% 50V	C.CAPACITOR	C 132 QETC1HM-475Z
C 14	QCT30UJ-3R3Y	C.CAPACITOR	1.000PF 10% 50V	C.CAPACITOR	C 133 QETC1HM-475Z
C 15	QCBB1HK-102Y	C.CAPACITOR	1.000PF 10% 50V	C.CAPACITOR	C 134 QETC1HM-475Z
C 16	QETC1AM-107Z	E.CAPACITOR	100MF 20% 10V	E.CAPACITOR	C 140 QETN1AM-108Z
C 17	QCS21H-361Z	C.CAPACITOR	3.60PF 5% 50V	C.CAPACITOR	C 141 QEK1HM-475Z
C 18	QCS21H-181Z	C.CAPACITOR	1.80PF 5% 50V	C.CAPACITOR	C 145 QETC1HM-105Z
C 19	QCS21H-361Z	C.CAPACITOR	3.60PF 5% 50V	C.CAPACITOR	C 146 QFLC1HJ-223Z
C 20	QCS21H-181Z	C.CAPACITOR	1.80PF 5% 50V	C.CAPACITOR	C 170 QETC1HM-475Z
C 21	QETC1AM-107Z	E.CAPACITOR	100MF 20% 10V	E.CAPACITOR	C 171 QFLC1HJ-333Z
C 22	QFV41HJ-104Z	E.CAPACITOR	1.0MF 20% 10V	E.CAPACITOR	C 172 QFV41HJ-104Z
C 23	QETC1EM-333Z	V		V	C 173 QETC1HM-475Z
C 24	QETC1AM-106Z	E.CAPACITOR	1.03MF 20% 25V	E.CAPACITOR	C 174 QETC1HM-105Z
C 25	QETC1AM-106Z	E.CAPACITOR	1.0MF 20% 16V	E.CAPACITOR	C 181 QETC1HM-242
C 26	QETC1AM-106Z	E.CAPACITOR	220MF 20% 10V	E.CAPACITOR	C 182 QETC1AM-107Z
C 27	QETC1AM-227Z	E.CAPACITOR	220MF 20% 10V	E.CAPACITOR	C 183 QFV41HJ-224Z
C 28	QETC1AM-106Z	E.CAPACITOR	1.0MF 20% 10V	E.CAPACITOR	C 184 QETC1AM-107Z
C 29	QETC1AM-106Z	E.CAPACITOR	1.000PF 10% 50V	E.CAPACITOR	C 185 QCBB1HK-102Y
C 30	QETC1AM-106Z	E.CAPACITOR	1.000PF 10% 50V	E.CAPACITOR	C 186 QETM1CM-228
C 31	QETC1AM-106Z	E.CAPACITOR	1.000PF 10% 50V	E.CAPACITOR	C 187 QFLB1HK-563
C 32	QETC1AM-106Z	E.CAPACITOR	4.7MF 20% 10V	E.CAPACITOR	C 189 QETC1HM-105Z
C 33	QETC1AM-106Z	E.CAPACITOR	.047MF 20% 25V	E.CAPACITOR	C 190 QETC1HM-105Z
C 34	QETC1AM-106Z	E.CAPACITOR	.047MF 20% 50V	E.CAPACITOR	C 191 QETC1HM-242
C 35	QETC1AM-227Z	E.CAPACITOR	.047MF 20% 50V	E.CAPACITOR	C 192 QETC1AM-107Z
C 36	QETC1AM-106Z	E.CAPACITOR	.047MF 20% 50V	E.CAPACITOR	C 193 QETC1HM-475Z
C 37	QETC1HM-225Z	E.CAPACITOR	.047MF 20% 25V	E.CAPACITOR	C 194 QETC1HM-475Z
C 38	QETC1HM-684Z	E.CAPACITOR	.047MF 20% 50V	E.CAPACITOR	C 195 QCBB1HK-102Y
C 39	QETC1HM-684Z	E.CAPACITOR	.047MF 20% 50V	E.CAPACITOR	C 196 QETM1CM-228
C 40	QETC1HM-684Z	E.CAPACITOR	4.7MF 20% 10V	E.CAPACITOR	C 189 QETC1HM-105Z
C 41	QETC1AM-470Z	E.CAPACITOR	.47MF 20% 50V	E.CAPACITOR	C 197 QFLB1HK-563
C 42	QETC1AM-470Z	E.CAPACITOR	.47MF 20% 50V	E.CAPACITOR	C 198 QETC1HM-105Z
C 43	QCSB1HJ-180Y	C.CAPACITOR	18PF 5% 50V	C.CAPACITOR	C 201 QFLB1HK-102
C 44	QCSB1HJ-180Y	C.CAPACITOR	.047MF 20% 25V	C.CAPACITOR	C 202 QFLC1HJ-562Z
C 45	QCC11EM-473V	C.CAPACITOR	.047MF 20% 50V	C.CAPACITOR	C 203 QETC1HM-475Z
C 46	QCCB1CM-152Y	C.CAPACITOR	1500PF 20% 16V	C.CAPACITOR	C 205 QCBB1HK-102Y
C 47	QCSB1HJ-200Y	C.CAPACITOR	20PF 5% 50V	C.CAPACITOR	C 206 QFLC1HJ-223Z
C 48	QCC11EM-153V	C.CAPACITOR	.015MF 20% 25V	C.CAPACITOR	C 207 QETC1HM-226Z
C 49	QCC11EM-153V	C.CAPACITOR	.015MF 20% 50V	C.CAPACITOR	C 208 QETC1HM-221Y
C 50	QETC1HM-474Z	E.CAPACITOR	.47MF 20% 50V	E.CAPACITOR	

BLOCK NO. 01111111

A	REF.	PARTS NO.	PARTS NAME	SUFFIX	REMARKS	BLOCK NO. 01111111
C	281	QETC1AM-224Z	E.CAPACITOR	.22MF 20% 50V		
C	282	QETC1AM-107ZN	E.CAPACITOR	100MF 20% 10V		
C	283	QFV41HJ-224ZM	T.F.CAPACITOR	.22MF 5% 50V		
C	284	QETC1AM-107ZN	E.CAPACITOR	100MF 20% 10V		
C	285	QCBBI1HK-102Y	E.CAPACITOR	1000PF 10% 50V		
C	286	QETC1CM-228	E.CAPACITOR	2200MF 20% 10V		
C	287	QFLB1HJ-563	M.CAPACITOR	.056MF 5% 50V		
C	289	QCBBI1HK-221Y	C.CAPACITOR	2200PF 10% 50V		
C	301	QETC1AM-107ZN	E.CAPACITOR	100MF 20% 10V		
C	302	QCBBI1HK-151Y	C.CAPACITOR	1500PF 10% 50V		
C	303	QETC1AM-336ZM	E.CAPACITOR	33MF 20% 10V		
C	304	QETC1AM-107ZN	E.CAPACITOR	100MF 20% 10V		
C	306	QETC1AM-107ZN	E.CAPACITOR	100MF 20% 10V		
C	307	QETC1AM-107ZN	E.CAPACITOR	100MF 20% 10V		
C	308	QETC1CM-476Z	E.CAPACITOR	4MF 20% 16V		
C	321	QETC1AM-107ZN	E.CAPACITOR	100MF 20% 10V		
C	325	QETC1AM-106ZN	E.CAPACITOR	10MF 20% 50V		
C	330	QETC1CM-226ZM	E.CAPACITOR	22MF 20% 16V		
C	331	QETC1AM-476Z	E.CAPACITOR	47MF 20% 10V		
C	332	QCY31HK-472Z	C.CAPACITOR	4700PF 10% 50V		
C	333	QCY31HK-682Z	C.CAPACITOR	6800PF 10% 50V		
C	334	QFLB1HJ-182	M.CAPACITOR	1800PF 5% 50V		
C	336	QCS31HJ-121Z	C.CAPACITOR	120PF 5% 50V		
C	338	QEK61EM-106ZN	E.CAPACITOR	10MF 20% 25V		
C	350	QETC1AM-107ZN	E.CAPACITOR	100MF 20% 10V		
C	371	QETC1AM-107ZN	E.CAPACITOR	100MF 20% 10V		
C	372	QETC1CM-476Z	E.CAPACITOR	4.7MF 20% 16V		
C	373	QETC1AM-225ZN	E.CAPACITOR	2.2MF 20% 50V		
C	374	QETB1HM-226E	E.CAPACITOR	22MF 20% 50V		
C	801	QETM1EM-338	E.CAPACITOR	3300MF 20% 25V		
C	802	QETC1AM-107ZN	E.CAPACITOR	100MF 20% 10V		
C	803	QETC1AM-227Z	E.CAPACITOR	220MF 20% 25V		
C	901	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V		
C	903	QETC1EM-475ZM	E.CAPACITOR	4.7MF 20% 10V		
C	904	QETC1AM-227Z	E.CAPACITOR	220MF 20% 10V		
C	911	QCVB1CN-103Y	C.CAPACITOR	.010MF 30% 16V		
C	913	QETC1EM-475ZM	E.CAPACITOR	4.7MF 20% 25V		
C	995	QETC1AM-337ZN	E.CAPACITOR	330MF 20% 10V		
CF	1	VCF213B-105	C.FILTER			
CF	2	VCF213B-105	C.FILTER			
CNTP1		VMC0041-003	CONNECTOR	TEST POINT		
CN301		VMC0040-003	CONNECTOR	A HEAD		
CN302		VMC0107-004	SOCKET	MOTOR		
CN304		VMC0040-0042	CONNECTOR	B HEAD		
CN305		EMU5109-005A	SOCKET			
CN307		VMC0075-008N	CONNECTOR	MECHA SW		
CN351		EMV7122-005Z	SOCKET	CD		
CN352		EMV15109-005A	SOCKET	MYCON		
D	1	ISS133	DIODE			
D	2	ISS133	DIODE			
D	3	ISS133	DIODE			
D	4	MA546	VC DIODE	FM AFC		
D	9	ISS133	DIODE			

REF.		PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R 135	QRD161J-103	C.RESISTOR	10K 5% 1/6W		
R 136	QRD161J-472	C.RESISTOR	4.7K 5% 1/6W		
R 137	QRD161J-103	C.RESISTOR	10K 5% 1/6W		
R 138	QRD161J-472	C.RESISTOR	4.7K 5% 1/6W		
R 139	QRD161J-163	C.RESISTOR	16K 5% 1/6W		
R 161	QRD161J-821	C.RESISTOR	820 5% 1/6W		
R 170	QRD161J-225	C.RESISTOR	2.2M 5% 1/6W		
R 171	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W		
R 172	QRD161J-334	C.RESISTOR	330K 5% 1/6W		
R 173	QRD161J-822	C.RESISTOR	8.2K 5% 1/6W		
R 174	QRD161J-152	C.RESISTOR	1.5K 5% 1/6W		
R 175	QRD167J-332	C.RESISTOR	3.3K 5% 1/6W		
R 177	QRD161J-243	C.RESISTOR	24K 5% 1/6W		
R 178	QRD161J-224	C.RESISTOR	220K 5% 1/6W		
R 179	QRD161J-223	C.RESISTOR	2.2K 5% 1/6W		
R 180	QRD167J-121	C.RESISTOR	22K 5% 1/6W		
R 181	QRD167J-121	C.RESISTOR	120 5% 1/6W		
R 182	QRD20077	F.RESISTOR	4.7 1.0W		
R 183	QRD161J-101	C.RESISTOR	100 5% 1/6W		
R 184	QRD161J-183	C.RESISTOR	18K 5% 1/6W		
R 186	QRD161J-101	C.RESISTOR	100 5% 1/6W		
R 201	QRD161J-183	C.RESISTOR	18K 5% 1/6W		
R 202	QRD161J-224	C.RESISTOR	220K 5% 1/6W		
R 203	QRD167J-682	C.RESISTOR	6.8K 5% 1/6W		
R 205	QRD167J-121	C.RESISTOR	120 5% 1/6W		
R 211	QRD167J-682	C.RESISTOR	6.8K 5% 1/6W		
R 212	QRD167J-562	C.RESISTOR	5.6K 5% 1/6W		
R 213	QRD161J-223	C.RESISTOR	22K 5% 1/6W		
R 214	QRD161J-122	C.RESISTOR	1.2K 5% 1/6W		
R 215	QRD167J-562	C.RESISTOR	5.6K 5% 1/6W		
R 217	QRD161J-363	C.RESISTOR	36K 5% 1/6W		
R 220	QRD161J-334	C.RESISTOR	330K 5% 1/6W		
R 221	QRD161J-393	C.RESISTOR	39K 5% 1/6W		
R 222	QRD161J-681	C.RESISTOR	680 5% 1/6W		
R 223	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W		
R 225	QRD161J-332	C.RESISTOR	3.3K 5% 1/6W		
R 226	QRD167J-562	C.RESISTOR	5.6K 5% 1/6W		
R 227	QRD161J-392	C.RESISTOR	3.9K 5% 1/6W		
R 228	QRD161J-100	C.RESISTOR	10 5% 1/6W		
R 231	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W		
R 232	QRD167J-562	C.RESISTOR	5.6K 5% 1/6W		
R 234	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W		
R 235	QRD161J-103	C.RESISTOR	10K 5% 1/6W		
R 236	QRD161J-472	C.RESISTOR	4.7K 5% 1/6W		
R 237	QRD161J-103	C.RESISTOR	10K 5% 1/6W		
R 238	QRD161J-472	C.RESISTOR	4.7K 5% 1/6W		
R 239	QRD161J-163	C.RESISTOR	16K 5% 1/6W		
R 261	QRD161J-821	C.RESISTOR	820 5% 1/6W		
R 270	QRD161J-225	C.RESISTOR	2.2M 5% 1/6W		
R 271	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W		
R 272	QRD161J-334	C.RESISTOR	330K 5% 1/6W		
R 273	QRD161J-822	C.RESISTOR	8.2K 5% 1/6W		
R 274	QRD161J-152	C.RESISTOR	1.5K 5% 1/6W		
R 275	QRD161J-243	C.RESISTOR	3.3K 5% 1/6W		
R 277	QRD161J-243	C.RESISTOR	24K 5% 1/6W		

REF.		PARTS NO.	PARTS NAME	REMARKS	SUFFIX
Q 225	DTC114TSTP	TRANSISTOR			
Q 271	2SC001 (L-K)	TRANSISTOR			
Q 321	DTA144ES	TRANSISTOR			
Q 331	2SC1740S (R-S)	TRANSISTOR			
Q 332	DTC144ES	TRANSISTOR			
Q 333	DTC114YS	TRANSISTOR			
Q 350	DTC144ES	TRANSISTOR			
Q 901	2SB772 (Q-P)	TRANSISTOR			
Q 902	2SC1740S (R-S)	TRANSISTOR			
Q 903	2SC1740S (R-S)	TRANSISTOR			
Q 911	2SB772 (Q-P)	TRANSISTOR			
Q 912	2SC1740S (R-S)	TRANSISTOR			
Q 913	2SC1740S (R-S)	TRANSISTOR			
Q 995	2SA912 (L-K)	TRANSISTOR			
R 1	GRD161J-470	C.RESISTOR	47 5% 1/6W		
R 2	GRD161J-220	C.RESISTOR	22 5% 1/6W		
R 3	GRD161J-104	C.RESISTOR	100K 5% 1/6W	VX	
R 5	GRD161J-224	C.RESISTOR	220K 5% 1/6W		
R 6	GRD161J-471	C.RESISTOR	470 5% 1/6W		
R 7	GRD161J-331	C.RESISTOR	330 5% 1/6W		
R 11	GRD161J-473	C.RESISTOR	47K 5% 1/6W	VX	
R 12	GRD161J-104	C.RESISTOR	100K 5% 1/6W		
R 14	GRD161J-393	C.RESISTOR	39K 5% 1/6W		
R 15	GRD161J-102	C.RESISTOR	1.0K 5% 1/6W		
R 16	GRD161J-472	C.RESISTOR	4.7K 5% 1/6W		
R 17	GRD161J-472	C.RESISTOR	4.7K 5% 1/6W		
R 18	GRD161J-102	C.RESISTOR	1.0K 5% 1/6W		
R 20	GRD161J-563	C.RESISTOR	56K 5% 1/6W		
R 22	GRD161J-47	C.RESISTOR	47 5% 1/6W		
R 24	GRD161J-103	C.RESISTOR	10K 5% 1/6W		
R 25	GRD161J-183	C.RESISTOR	18K 5% 1/6W		
R 28	GRD161J-103	C.RESISTOR	10K 5% 1/6W		
R 30	GRD161J-684	C.RESISTOR	680K 5% 1/6W		
R 31	GRD161J-101	C.RESISTOR	100 5% 1/6W		
R 101	GRD161J-183	C.RESISTOR	18K 5% 1/6W		
R 102	GRD161J-224	C.RESISTOR	220K 5% 1/6W		
R 105	GRD167J-682	C.RESISTOR	6.8K 5% 1/6W		
R 111	GRD167J-121	C.RESISTOR	120 5% 1/6W		
R 112	GRD167J-682	C.RESISTOR	6.8K 5% 1/6W		
R 113	GRD167J-562	C.RESISTOR	5.6K 5% 1/6W		
R 114	GRD167J-122	C.RESISTOR	1.2K 5% 1/6W		
R 115	GRD167J-562	C.RESISTOR	5.6K 5% 1/6W		
R 117	GRD167J-362	C.RESISTOR	3.6K 5% 1/6W		
R 120	GRD161J-334	C.RESISTOR	330K 5% 1/6W		
R 121	GRD161J-393	C.RESISTOR	39K 5% 1/6W		
R 122	GRD161J-681	C.RESISTOR	680 5% 1/6W		
R 123	GRD161J-102	C.RESISTOR	1.0K 5% 1/6W		
R 125	GRD167J-332	C.RESISTOR	3.3K 5% 1/6W		
R 126	GRD167J-562	C.RESISTOR	5.6K 5% 1/6W		
R 127	GRD161J-39	C.RESISTOR	3.9K 5% 1/6W		
R 128	GRD161J-10	C.RESISTOR	10.5K 5% 1/6W		
R 131	GRD161J-102	C.RESISTOR	1.0K 5% 1/6W		
R 132	GRD167J-562	C.RESISTOR	5.6K 5% 1/6W		
R 133	GRD167J-362	C.RESISTOR	3.6K 5% 1/6W		

BLOCK NO. 01111111

A	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R 321	QRD161J-103	C.RESISTOR	10K 5% 1/6W		
R 322	QRD161J-221	C.RESISTOR	220K 5% 1/6W		
R 323	QRD161J-102	C.RESISTOR	2.2K 5% 1/6W		
R 324	QRD161J-102	C.RESISTOR	22K 5% 1/6W		
R 325	QRD161J-182	C.RESISTOR	120 5% 1/6W		
R 327	QRD161J-390	C.RESISTOR	4.7 10W		
R 328	QRD161J-472	C.RESISTOR	100 5% 1/6W		
R 329	QRD161J-104	C.RESISTOR	18K 5% 1/6W		
R 330	QRD161J-223	C.RESISTOR	100 5% 1/6W		
R 331	QRD161J-120	C.RESISTOR	100 5% 1/6W		
R 332	QRD161J-123	C.RESISTOR	2.2M 5% 1/6W		
R 333	QRD161J-101	C.RESISTOR	10K 5% 1/6W		
R 334	QRD161J-222	C.RESISTOR	220 5% 1/6W		
R 335	QRD161J-391	C.RESISTOR	1.0K 5% 1/6W		
R 336	QRD161J-561	C.RESISTOR	1.0K 5% 1/6W		
R 340	QRD161J-562	C.RESISTOR	1.0K 5% 1/6W		
R 350	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W		
R 371	QRD161J-181	C.RESISTOR	180 5% 1/6W		
R 372	QRD161J-103	C.RESISTOR	10K 5% 1/6W		
R 373	QRD167J-562	C.RESISTOR	5.6K 5% 1/6W		
R 374	QRD161J-154	C.RESISTOR	150K 5% 1/6W		
R 375	QRD161J-392	C.RESISTOR	3.9K 5% 1/6W		
R 376	QRD161J-224	C.RESISTOR	220K 5% 1/6W		
R 378	QRD161J-103	C.RESISTOR	10K 5% 1/6W		
R 381	QRD161J-303	C.RESISTOR	3.3K 5% 1/6W		
R 901	QRD161J-681	C.RESISTOR	680 5% 1/6W		
R 902	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W		
R 903	QRD161J-221	C.RESISTOR	220 5% 1/6W		
R 904	QRD167J-562	C.RESISTOR	5.6K 5% 1/6W		
R 905	QRD161J-772	C.RESISTOR	4.7K 5% 1/6W		
R 906	QRD161J-822	C.RESISTOR	8.2K 5% 1/6W		
R 911	QRD161J-681	C.RESISTOR	680 5% 1/6W		
R 912	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W		
R 913	QRD167J-682	C.RESISTOR	6.8K 5% 1/6W		
R 914	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W		
R 915	QRD161J-772	C.RESISTOR	4.7K 5% 1/6W		
R 916	QRD161J-822	C.RESISTOR	8.2K 5% 1/6W		
R 917	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W		
R 995	QRD161J-272	C.RESISTOR	2.7K 5% 1/6W		
R 996	QRD161J-182	C.RESISTOR	1.8K 5% 1/6W		

BLOCK NO. 01111111

A	REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX
R 278	QRD161J-224	C.RESISTOR	220K 5% 1/6W	C.RESISTOR	180K 5% 1/6W
R 279	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W	R 998	1.0K 5% 1/6W
R 280	QRD161J-223	C.RESISTOR	22K 5% 1/6W	S 1	SLIDE SW
R 281	QRD167J-121	C.RESISTOR	120 5% 1/6W	S 303	SLIDE SW
R 282	QRD167J-487X	F.RESISTOR	4.7 10W	S 331	SLIDE SW
R 283	QRD161J-101	C.RESISTOR	100 5% 1/6W	S 371	BASS SW
R 284	QRD161J-183	C.RESISTOR	18K 5% 1/6W	T 1	MULTI BASS SW
R 286	QRD161J-101	C.RESISTOR	100 5% 1/6W	T 2	IFT COIL
R 301	QRD161J-121	C.RESISTOR	100 5% 1/6W	TC 9	IFT COIL
R 305	QRD161J-225	C.RESISTOR	2.2M 5% 1/6W	TC 10	QAT3722-300ZM
R 306	QRD161J-103	C.RESISTOR	10K 5% 1/6W	TC 11	QAT3B20-100Z
R 307	QRD161J-561	C.RESISTOR	560 5% 1/6W	VC 1	QAP1224-520V5
R 310	QRD167J-121	C.RESISTOR	120 5% 1/6W	VR301	VRPA603-102AZA
R 311	QRD161J-181	C.RESISTOR	180 5% 1/6W	VR361	QVDB12D-V01
R 312	QRD161J-103	C.RESISTOR	10K 5% 1/6W	VR362	QVDB17A-V02
R 313	QRD161J-103	C.RESISTOR	10K 5% 1/6W		
R 321	QRD161J-221	C.RESISTOR	220 5% 1/6W		
R 322	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W		
R 324	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W		
R 326	QRD161J-182	C.RESISTOR	1.8K 5% 1/6W		
R 327	QRD161J-390	C.RESISTOR	FOR MOTOR		
R 328	QRD161J-472	C.RESISTOR	4.7K 5% 1/6W		
R 329	QRD161J-104	C.RESISTOR	100K 5% 1/6W		
R 330	QRD161J-223	C.RESISTOR	22K 5% 1/6W		
R 331	QRD161J-120	C.RESISTOR	12.5K 1/6W		
R 332	QRD161J-123	C.RESISTOR	12K 5% 1/6W		
R 333	QRD161J-101	C.RESISTOR	100 5% 1/6W		
R 334	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W		
R 335	QRD161J-391	C.RESISTOR	390 5% 1/6W		
R 336	QRD161J-561	C.RESISTOR	560 5% 1/6W		
R 340	QRD161J-562	C.RESISTOR	2.2K 5% 1/6W		
R 350	QRD161J-222	C.RESISTOR	180 5% 1/6W		
R 371	QRD161J-181	C.RESISTOR	10K 5% 1/6W		
R 372	QRD167J-103	C.RESISTOR	5.6K 5% 1/6W		
R 373	QRD167J-562	C.RESISTOR	5.6K 5% 1/6W		
R 374	QRD161J-154	C.RESISTOR	150K 5% 1/6W		
R 375	QRD161J-392	C.RESISTOR	3.9K 5% 1/6W		
R 376	QRD161J-224	C.RESISTOR	220K 5% 1/6W		
R 378	QRD161J-103	C.RESISTOR	10K 5% 1/6W		
R 381	QRD161J-303	C.RESISTOR	3.3K 5% 1/6W		
R 901	QRD161J-681	C.RESISTOR	680 5% 1/6W		
R 902	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W		
R 903	QRD161J-221	C.RESISTOR	220 5% 1/6W		
R 904	QRD167J-562	C.RESISTOR	5.6K 5% 1/6W		
R 905	QRD161J-772	C.RESISTOR	4.7K 5% 1/6W		
R 906	QRD161J-822	C.RESISTOR	8.2K 5% 1/6W		
R 911	QRD161J-681	C.RESISTOR	680 5% 1/6W		
R 912	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W		
R 913	QRD167J-682	C.RESISTOR	6.8K 5% 1/6W		
R 914	QRD161J-222	C.RESISTOR	2.2K 5% 1/6W		
R 915	QRD161J-772	C.RESISTOR	4.7K 5% 1/6W		
R 916	QRD161J-822	C.RESISTOR	8.2K 5% 1/6W		
R 917	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W		
R 995	QRD161J-272	C.RESISTOR	2.7K 5% 1/6W		
R 996	QRD161J-182	C.RESISTOR	1.8K 5% 1/6W		

CD Operation Switch board

BLOCK NO. 02111111

▲ REF.	PARTS NO.	PARTS NAME	REMARKS	SUFFIX	BLOCK NO. 02111111	
C 701	QER11AM-107	E. CAPACITOR	100MF 20% 10V			
C 702	QCC11EM-103V	C. CAPACITOR	.010MF 20% 25V		C 501 QCB1HK-821Y	820PF 10% 50V
C 704	QCB1CM-103Y	C. CAPACITOR	.010MF 20% 16V		C 503 QCVB1CN-103Y	.010MF 30% 16V
C 705	QER11HM-474Z	E. CAPACITOR	.47MF 20% 50V		C 504 QETC1CM-106Z	.10MF 20% 16V
C 706	QER11AM-336Z	E. CAPACITOR	.33MF 20% 10V		C 511 QCSB1HJ-7R9	3.9PF 10% 50V
C 707	QCVB1CN-103Y	C. CAPACITOR	.010MF 30% 16V		C 512 QCSB1HJ-270Y	.27PF 5% 50V
C 991	QFV71HJ-394ZM	TF CAPACITOR	.39MF 5% 50V		C 513 QFIC1HJ-104ZM	.10MF 5% 50V
C 992	QFV71HJ-394ZM	TF CAPACITOR	.39MF 5% 50V		C 514 QMN31HJ-4722	.470PF 5% 50V
C 993	QFV71HJ-394ZM	TF CAPACITOR	.39MF 5% 50V		C 521 QCBB1HK-331Y	.330PF 10% 50V
C 994	QFV71HJ-394ZM	TF CAPACITOR	.39MF 5% 50V		C 522 QFLC1HJ-4732M	.047MF 5% 50V
CN701	VMC0263-R09	CONNECTOR	FROM CD		C 523 QIV81HJ-154	.15MF 5% 50V
CN997	VMC0041-003	CONNECTOR	CONN TO MAIN PW		C 524 QEN51HM-745	N.P.E. CAPACITOR
D 701	MT25.1JB	Z DIODE			C 529 QEC1IAM-336ZM	L.7MF 20% 50V
D 991	1N5401TM	SI DIODE			C 531 QCVB1CM-322Y	E. CAPACITOR
D 992	1N5401TM	SI DIODE			C 541 QCB1HK-101Y	C. CAPACITOR
D 993	1N5401TM	SI DIODE			C 542 QFIC1HJ-1032M	M. CAPACITOR
D 994	1N5401TM	SI DIODE			C 543 QFIC1HJ-5332M	M. CAPACITOR
D 995	1N5401TM	SI DIODE			C 545 QEN61HM-105Z	M. CAPACITOR
FW702	EWR22D-122SS	FLAT WIRE	TO CD OP/CLS PW		C 546 QFLC1HJ-232M	M. CAPACITOR
IC701	MN130804JBB	IC	REMOTE SENSOR	E, EN	C 561 QETC1AM-476Z	E. CAPACITOR
IC702	NJH2H380A	IC		E, EN	C 562 QEC1CHM-475Z	E. CAPACITOR
J 995	QMA31B-V01	DC JACK			C 581 QETC1AM-477Z	E. CAPACITOR
J 999	QMC0263-004BS	AC SOCKET			C 582 QEK41CM-476	E. CAPACITOR
LCD01	VGL1145-001	LCD			C 591 VCP0012-107Z	C. CAPACITOR
Q 701	DTC114ES	DEGI. TRANSISTOR	1.0K 5% 1/6W		C 592 VCP0012-105Z	C. CAPACITOR
R 304	QRD161J-102	C. RESISTOR	2.2K 5% 1/6W		C 593 QCC11EM-104V	C. CAPACITOR
R 701	QRD161J-222	C. RESISTOR	2.2K 5% 1/6W		C 599 QEF61AM-107Z	E. CAPACITOR
R 702	QRD161J-222	C. RESISTOR	2.2K 5% 1/6W		C 601 QCSB1HJ-220Y	C. CAPACITOR
R 703	QRD161J-222	C. RESISTOR	2.2K 5% 1/6W		C 602 QFLC1HJ-220Y	C. CAPACITOR
R 704	QRD161J-222	C. RESISTOR	2.2K 5% 1/6W		C 603 QFV1HJ-104AZM	TF CAPACITOR
R 705	QRD161J-222	C. RESISTOR	2.2K 5% 1/6W		C 604 QCC11EM-104V	C. CAPACITOR
R 706	QRD161J-222	C. RESISTOR	2.2K 5% 1/6W		C 605 QCVB1CN-103Y	C. CAPACITOR
R 707	QRD161J-222	C. RESISTOR	2.2K 5% 1/6W		C 606 QCC11EM-473V	C. CAPACITOR
R 708	QRD161J-222	C. RESISTOR	2.2K 5% 1/6W		C 607 QFV1HJ-104AZM	TF CAPACITOR
R 709	QRD161J-222	C. RESISTOR	2.2K 5% 1/6W		C 608 QCC11EM-473V	C. CAPACITOR
R 710	QRD161J-222	C. RESISTOR	2.2K 5% 1/6W		C 609 QFV1HJ-104AZM	TF CAPACITOR
R 711	QRD161J-222	C. RESISTOR	2.2K 5% 1/6W		C 610 QCS31HJ-332Z	M. CAPACITOR
R 712	QRD161J-222	C. RESISTOR	2.2K 5% 1/6W		C 611 QCC11EM-1032M	M. CAPACITOR
R 713	QRD161J-101	C. RESISTOR	100 5% 1/6W		C 612 QFIC1HJ-1032M	M. CAPACITOR
R 714	QRD161J-222	C. RESISTOR	10K 5% 1/6W		C 613 QER00JM-107Z	E. CAPACITOR
R 715	QRD161J-103	C. RESISTOR	10K 5% 1/6W		C 614 QEK61AM-107Z	E. CAPACITOR
R 716	QRD161J-103	C. RESISTOR	10K 5% 1/6W		C 615 QCSB1HJ-101Y	C. CAPACITOR
R 717	QRD161J-152	C. RESISTOR	1.5K 5% 1/6W		C 616 QCC11EM-1032	M. CAPACITOR
R 718	QRD161J-472	C. RESISTOR	4.7K 5% 1/6W		C 617 QFBB1HK-107Z	E. CAPACITOR
R 719	QRD161J-103	C. RESISTOR	10K 5% 1/6W		C 618 QER00JM-107Z	E. CAPACITOR
R 720	QRD161J-472	C. RESISTOR	4.7K 5% 1/6W		C 619 QCSB1HJ-101Y	C. CAPACITOR
R 721	QRD161J-473	C. RESISTOR	4.7K 5% 1/6W		C 620 QCB1HK-101Y	C. CAPACITOR
S 301	QSTK101-V05	PUSH SWITCH	R/P SW		C 621 QEK61AM-107Z	E. CAPACITOR
S 701	QSQ1A11-V04Z	TAUT SW	REWIND		C 622 QCSB1HJ-270Y	27PF 5% 50V
S 702	QSQ1A11-V04Z	TAUT SW	FORWARD		C 623 QCSB1HJ-270Y	27PF 5% 50V
S 704	QSQ1A11-V04Z	TAUT SW	PLAY/PAUSE		CN501 EMV144-015R	ESPIN CONNECTOR
S 705	QSQ1A11-V04Z	TAUT SW	STOP		CN502 VMC0075-006	TO PICK UP
S 710	VSH1153-001	SWITCH	OPEN/CLOSE SW		CN601 VMC0163-R09	TO CPU
X 701	EFO-EC194A4	CERAMIC RESONAT			IC201 TA8191F	SERVO LSI
					IC202 BA6298FP	POWER DRIVER

CD Amplifier board

BLOCK NO. 03111111

▲ REF.	PARTS NO.	SUFFIX	BLOCK NO. 03111111	
C 701	QER11AM-107	E. CAPACITOR	100MF 20% 10V	C. CAPACITOR
C 702	QCC11EM-103V	C. CAPACITOR	.010MF 20% 25V	C. CAPACITOR
C 704	QCB1CM-103Y	C. CAPACITOR	.010MF 20% 16V	C. CAPACITOR
C 705	QER11HM-474Z	E. CAPACITOR	.47MF 20% 50V	C. CAPACITOR
C 706	QER11AM-336Z	E. CAPACITOR	.33MF 20% 10V	C. CAPACITOR
C 707	QCVB1CN-103Y	C. CAPACITOR	.010MF 30% 16V	C. CAPACITOR
C 991	QFV71HJ-394ZM	TF CAPACITOR	.39MF 5% 50V	M. CAPACITOR
C 992	QFV71HJ-394ZM	TF CAPACITOR	.39MF 5% 50V	M. CAPACITOR
C 993	QFV71HJ-394ZM	TF CAPACITOR	.39MF 5% 50V	M. CAPACITOR
C 994	QFV71HJ-394ZM	TF CAPACITOR	.39MF 5% 50V	M. CAPACITOR
CN701	VMC0263-R09	CONNECTOR	FROM CD	N.P.E. CAPACITOR
CN997	VMC0041-003	CONNECTOR	CONN TO MAIN PW	E. CAPACITOR
D 701	MT25.1JB	Z DIODE	Z DIODE	820PF 10% 50V
D 991	1N5401TM	SI DIODE	SI DIODE	.330PF 10% 50V
D 992	1N5401TM	SI DIODE	SI DIODE	.047MF 5% 50V
D 993	1N5401TM	SI DIODE	SI DIODE	.15MF 5% 50V
D 994	1N5401TM	SI DIODE	SI DIODE	.15MF 5% 50V
D 995	1N5401TM	SI DIODE	SI DIODE	.15MF 5% 50V
FW702	EWR22D-122SS	FLAT WIRE	TO CD OP/CLS PW	.022MF 5% 50V
IC701	MN130804JBB	IC	REMOTE SENSOR	.022MF 5% 50V
IC702	NJH2H380A	IC		.47MF 20% 50V
J 995	QMA31B-V01	DC JACK		.47MF 20% 10V
J 999	QMC0263-004BS	AC SOCKET		.47MF 20% 16V
LCD01	VGL1145-001	LCD		
Q 701	DTC114ES	DEGI. TRANSISTOR	1.0K 5% 1/6W	
R 304	QRD161J-102	C. RESISTOR	2.2K 5% 1/6W	
R 701	QRD161J-222	C. RESISTOR	2.2K 5% 1/6W	
R 702	QRD161J-222	C. RESISTOR	2.2K 5% 1/6W	
R 703	QRD161J-222	C. RESISTOR	2.2K 5% 1/6W	
R 704	QRD161J-222	C. RESISTOR	2.2K 5% 1/6W	
R 705	QRD161J-222	C. RESISTOR	2.2K 5% 1/6W	
R 706	QRD161J-222	C. RESISTOR	2.2K 5% 1/6W	
R 707	QRD161J-222	C. RESISTOR	2.2K 5% 1/6W	
R 708	QRD161J-222	C. RESISTOR	2.2K 5% 1/6W	
R 709	QRD161J-222	C. RESISTOR	2.2K 5% 1/6W	
R 710	QRD161J-222	C. RESISTOR	2.2K 5% 1/6W	
R 711	QRD161J-222	C. RESISTOR	2.2K 5% 1/6W	
R 712	QRD161J-222	C. RESISTOR	2.2K 5% 1/6W	
R 713	QRD161J-101	C. RESISTOR	100 5% 1/6W	
R 714	QRD161J-222	C. RESISTOR	10K 5% 1/6W	
R 715	QRD161J-103	C. RESISTOR	10K 5% 1/6W	
R 716	QRD161J-103	C. RESISTOR	10K 5% 1/6W	
R 717	QRD161J-152	C. RESISTOR	1.5K 5% 1/6W	
R 718	QRD161J-472	C. RESISTOR	4.7K 5% 1/6W	
R 719	QRD161J-103	C. RESISTOR	10K 5% 1/6W	
R 720	QRD161J-472	C. RESISTOR	4.7K 5% 1/6W	
R 721	QRD161J-473	C. RESISTOR	4.7K 5% 1/6W	
S 301	QSTK101-V05	PUSH SWITCH	R/P SW	
S 701	QSQ1A11-V04Z	TAUT SW	REWIND	
S 702	QSQ1A11-V04Z	TAUT SW	FORWARD	
S 704	QSQ1A11-V04Z	TAUT SW	PLAY/PAUSE	
S 705	QSQ1A11-V04Z	TAUT SW	STOP	
S 710	VSH1153-001	SWITCH	OPEN/CLOSE SW	
X 701	EFO-EC194A4	CERAMIC RESONAT		

REF.	PARTS NO.	PARTS NAME	REMARKS	BLOCK NO. 03	SUFFIX
R 616	QRD161J-333	C. RESISTOR	33K 5% 1/6W		
R 651	QRD161J-820	C. RESISTOR	82 5% 1/6W		
R 652	QRD161J-473	C. RESISTOR	47K 5% 1/6W		
R 653	QRD161J-473	C. RESISTOR	47K 5% 1/6W		
R 661	QRD161J-473	C. RESISTOR	47K 5% 1/6W		
R 662	QRD161J-473	C. RESISTOR	47K 5% 1/6W		
R 663	QRD161J-473	C. RESISTOR	47K 5% 1/6W		
R 664	QRD161J-473	C. RESISTOR	47K 5% 1/6W		
R 665	QRD161J-223	C. RESISTOR	22K 5% 1/6W		
R 666	QRD161J-223	C. RESISTOR	22K 5% 1/6W		
R 671	QRD161J-473	C. RESISTOR	47K 5% 1/6W		
R 672	QRD161J-473	C. RESISTOR	47K 5% 1/6W		
R 673	QRD161J-473	C. RESISTOR	47K 5% 1/6W		
R 674	QRD161J-473	C. RESISTOR	47K 5% 1/6W		
R 675	QRD161J-223	C. RESISTOR	22K 5% 1/6W		
R 676	QRD161J-223	C. RESISTOR	22K 5% 1/6W		
VR501	QVPA601-154A	V. RESISTOR			
X 601	CSA16.93MXZ040T	CERA LOCK	8.46MHz		

REF.		PARTS NO.	PARTS NAME	REMARKS	SUFFIX
IC601	TC9284BF	IC	1 CHIP PROCESSED	1 CHIP PROCESSED	BLOCK NO. 03
IC604	NJM4280L	IC	L.P.F	L.P.F	
Q 501	2SA922(L,K)	TRANSISTOR			
Q 581	2SA922(L,K)	TRANSISTOR			
Q 591	2SA923S(RS)	TRANSISTOR			
R 501	QRD161J-124	C.RESISTOR	120K 5% 1/6W		
R 502	QRD161J-103	C.RESISTOR	10K 5% 1/6W		
R 504	QRD161J-202	C.RESISTOR	2.0K 5% 1/6W		
R 505	QRD161J-100	C.RESISTOR	10.5% 1/6W		
R 506	QRD161J-101	C.RESISTOR	100 5% 1/6W		
R 507	QRD161J-120	C.RESISTOR	12.5% 1/6W		
R 511	QRD161J-183	C.RESISTOR	18K 5% 1/6W		
R 512	QRD161J-392	C.RESISTOR	3.9K 5% 1/6W		
R 513	QRD161J-332	C.RESISTOR	3.3K 5% 1/6W		
R 514	QRD161J-472	C.RESISTOR	4.7K 5% 1/6W		
R 515	QRD161J-103	C.RESISTOR	10K 5% 1/6W		
R 516	QRD161J-103	C.RESISTOR	10K 5% 1/6W		
R 517	QRD161J-202	C.RESISTOR	2.0K 5% 1/6W		
R 518	QRD161J-335YT	C.RESISTOR	3.3M 5% 1/6W		
R 521	QRD161J-156	C.RESISTOR	150K 5% 1/6W		
R 522	QRD161J-392	C.RESISTOR	3.9K 5% 1/6W		
R 523	QRD161J-392	C.RESISTOR	4.7K 5% 1/6W		
R 524	QRD161J-331	C.RESISTOR	330 5% 1/6W		
R 525	QRD161J-472	C.RESISTOR	4.7K 5% 1/6W		
R 529	QRD161J-562	C.RESISTOR	5.6K 5% 1/6W		
R 531	QRD161J-473	C.RESISTOR	4.7K 5% 1/6W		
R 532	QRD161J-106	C.RESISTOR	100K 5% 1/6W		
R 533	QRD161J-153	C.RESISTOR	15K 5% 1/6W		
R 541	QRD161J-123	C.RESISTOR	12K 5% 1/6W		
R 542	QRD167J-332	C.RESISTOR	3.3K 5% 1/6W		
R 543	QRD161J-473	C.RESISTOR	4.7K 5% 1/6W		
R 544	QRD161J-223	C.RESISTOR	22K 5% 1/6W		
R 545	QRD161J-103	C.RESISTOR	10K 5% 1/6W		
R 548	QRD161J-153	C.RESISTOR	15K 5% 1/6W		
R 549	QRD161J-821	C.RESISTOR	820 5% 1/6W		
R 550	QRD161J-104	C.RESISTOR	100K 5% 1/6W		
R 551	QRD161J-223	C.RESISTOR	22K 5% 1/6W		
R 552	QRD167J-562	C.RESISTOR	5.6K 5% 1/6W		
R 553	QRD161J-821	C.RESISTOR	820 5% 1/6W		
R 555	QRD161J-392	C.RESISTOR	3.9K 5% 1/6W		
R 559	QRD161J-155	C.RESISTOR	1.2M 5% 1/6W		
R 561	QRD167J-562	C.RESISTOR	5.6K 5% 1/6W		
R 562	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W		
R 563	QRD161J-152	C.RESISTOR	1.5K 5% 1/6W		
R 564	QRD167J-332	C.RESISTOR	3.3K 5% 1/6W		
R 565	QRD161J-633	C.RESISTOR	68K 5% 1/6W		
R 566	QRD161J-273	C.RESISTOR	27K 5% 1/6W		
R 583	QRD161J-101	C.RESISTOR	100 5% 1/6W		
R 584	QRD161J-331	C.RESISTOR	330 5% 1/6W		
R 591	QRD161J-473	C.RESISTOR	47K 5% 1/6W		
R 611	QRD161J-102	C.RESISTOR	1.0K 5% 1/6W		
R 612	QRD161J-103	C.RESISTOR	10K 5% 1/6W		
R 613	QRD161J-224	C.RESISTOR	220K 5% 1/6W		
R 614	QRD161J-473	C.RESISTOR	47K 5% 1/6W		
R 615	QRD161J-25	C.RESISTOR	2.2M 5% 1/6W		

15. Packing

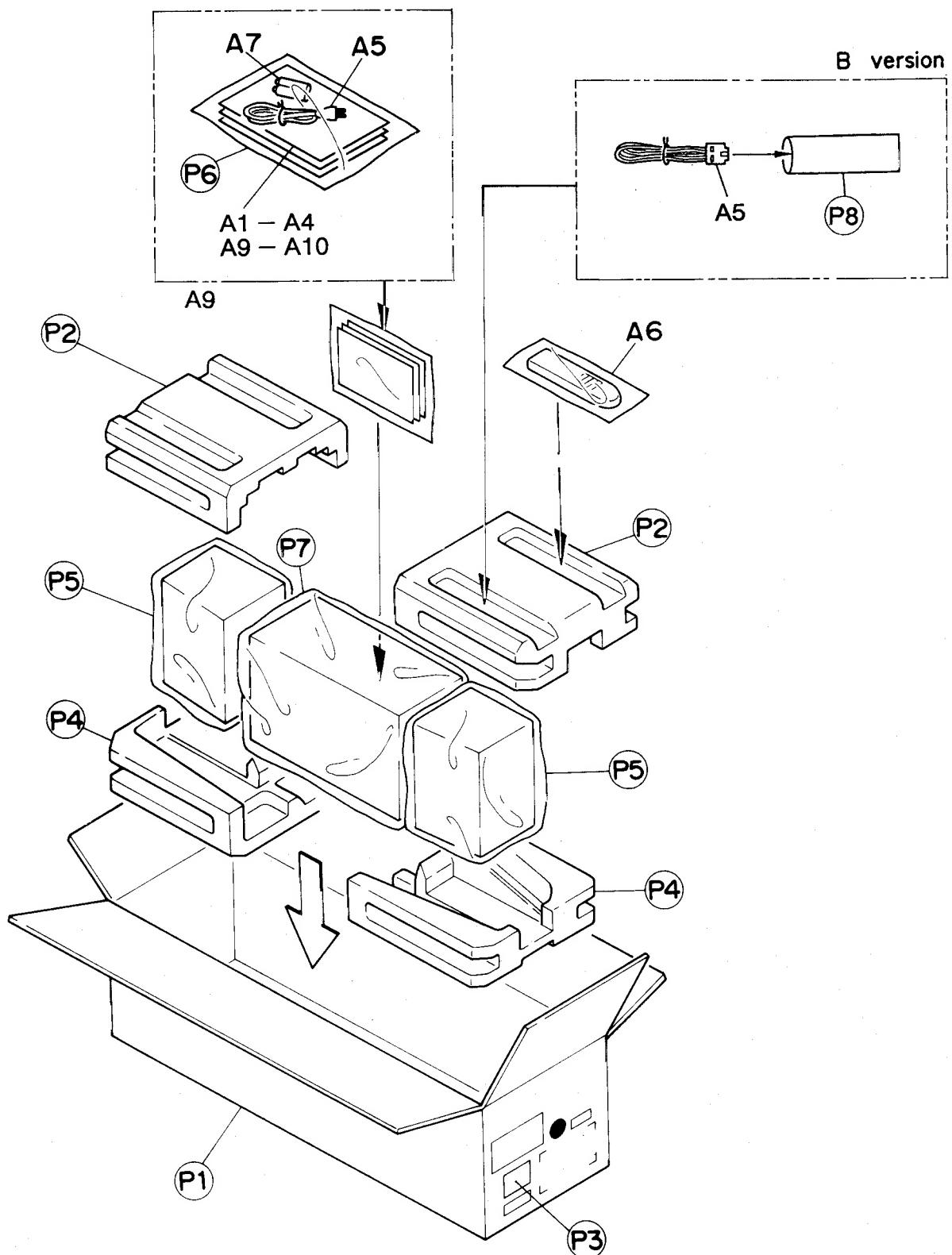


Fig. 15-1

■ Packing Parts List

BLOCK NO. M5MM □ □

▲	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	P 1	FMPC7004-001	CARTON		1		
	P 2	FMPH1008-001	SIDE CUSHION		1		
	P 3	*****	COMPUTER LABEL		1		
	P 4	FMPH1007-001	SIDE CUSHION		1		
	P 5	VPE3020-018	POLY BAG	FOR SPEAKER	2		
	P 6	E300196-033B	ENVELOPE	WARRANTY CA	1		
	P 7	VPE3020-022	POLY BAG	FOR RECEIVER	1		
	P 8	QPGA015-03503	POLY BAG	POWER CORD	1	B	

■ Accessories

BLOCK NO. M6MM □ □

▲	REF.	PARTS NO.	PARTS NAME	REMARKS	QTY	SUFFIX	CLR
	A 1	FMUN7004-911M	INSTRUCTIONS		1	VX	
		FMUN7004-251M	INSTRUCTIONS		1	E,GI	
	A 2	FMUN7004-261M	INSTRUCTIONS		1	E,EN,GI	
		FMUN7004-921M	INSTRUCTIONS		1	VX	
	A 3	FMUN7004-271M	INSTRUCTIONS		1	EN	
	A 4	FMUN7004-671M	INSTRUCTIONS		1	B,G	
	A 5	QMP5520-183BS	POWER CORD		1	B	
		QMP39FO-183E	POWER CORD		1		
	A 6	RM-RX620	REMOCON UNIT	VGR0021-001	1		
	A 7	UM-3D	BATTERY	FOR REMOCON	1		
	A 8	BT-20135	WARRANTY CARD		1	G	
		BT-54003-1	WARRANTY CARD		1	B	
	A 9	BT-20066A	DISTRI.LIST		1	B	
	A 10	E43486-340B	SAFETY SHEET		1	B	

PC – X75BK B/E/EN/G/GI/VX

JVC

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AUDIO PRODUCTS DIVISION 10-1, 1-chome, Ohwatari-machi, Maebashi-city, Japan

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